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## THE CLASS ACTION AS A FINANCIAL CALL OPTION

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# *The Class Action as a Financial Call Option*

Guy Halfteck\*

## ABSTRACT

Class action law enforcement is a resource-intensive undertaking, requiring investment of both intellectual capital and financial wherewithal. Building on insights developed in the economic theory of investment under uncertainty, the key theoretical proposition is that class action law enforcement comprises a multi-stage sequence of investment opportunities under conditions of multi-dimensional uncertainty. The properties of investment in class actions include (i) investment expenditures; (ii) future rewards on investment; (iii) multi-dimensional investment uncertainty; (iv) the irreversibility of investment expenditures; and (v) the sequential, multi-stage property of investment opportunities and investment decisions. The court appointment of class counsel is modeled as a judicially-granted monopoly over investment in class action law enforcement. At any given stage of the sequence (but for the last one), plaintiffs' attorneys and, later, court-appointed class counsel are faced with a financial call option, namely, an opportunity to invest and "buy," with some probability, the opportunity to invest in the stage that follows in the sequence. Plaintiffs' attorneys' and, subsequently, the court-appointed class counsel's incentives to invest and investment decisions throughout the sequence are overwhelmingly the most important determinant of the magnitude of liability exposure. These theoretical propositions provide the most conceptually-inclusive model of the incentive structure of class action law enforcement. This analytic model is conceptually-inclusive because the myriad decisions made by plaintiffs' attorneys and, subsequently, by class counsel in the course of class action law enforcement are perceived as sequential investment decisions under conditions of uncertainty. Thus, virtually any aspect relating to the conduct and performance of plaintiffs' attorneys becomes amenable to analysis as a sequential investment problem. Normative implications concerning the design of investment-oriented, welfare-enhancing regulation of class action law enforcement across different areas of law where class actions are used as an enforcement mechanism are derived.

**JEL Classification:** K13, K22, K32, K40, K41, K42

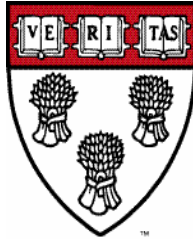
**KEYWORDS:** class actions, class counsel, investment opportunities, investment under uncertainty, multi-stage investment, option pricing, plaintiffs' attorneys, plaintiffs' law firms, sequential investment, systematic wrongdoing

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**I. INTRODUCTION: THE CLASS ACTION  
AS A FINANCIAL CALL OPTION**

This Article builds on insights developed in the economic theory of investment under conditions of uncertainty to advance a novel theory of class action law enforcement. The theory conceptualizes class action law enforcement as a financial call option, namely, as a complex form of investment opportunity that consists of multiple, sequential options to invest under conditions of uncertainty. This novel theory is both conceptually-inclusive and analytically-rigorous, thereby setting forth solid intellectual foundations necessary for adopting welfare-enhancing social policy and designing proper regulation of class action law enforcement.

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Class actions, as is well-recognized, provide an overwhelmingly powerful law enforcement mechanism that is capable of imposing, unlike any other civil law enforcement mechanism, a threat of liability exposure on business entities for the social consequences of systematic wrongdoing.<sup>1</sup> Monetary remedies, including billions of aggregate liability dollars that corporations internalize under the aegis of class action litigation and settlement, evince the intrinsic capacity of the class action mechanism to enforce the law and serve the social objectives of deterrence

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<sup>1</sup> An economic analysis of the functional capacity of class action law enforcement to impose a threat of liability and deter systematic, risk-producing activities is found in Guy Halfteck, *The Class Action Enterprise: A General Economic Theory of Mass-produced Law Enforcement* Parts II-III (Harvard Law School Library, 2003) (hereinafter: Halfteck, *The Class Action Enterprise*). The analysis shows that this capacity squarely derives from integrating two economic properties in the design of the class actions mechanism, namely—(i) law enforcement entrepreneurship that is necessary to by-pass collective action problems, and (ii) formal aggregation and collectivization of numerous, similarly-situated victims into a single, cohesive pool, thereby creating an opportunity to exploit economies of scale of effort in class action law enforcement.

For a detailed discussion of litigation scale economies see David Rosenberg, *Mass Tort Class Actions: What Defendants Have and Plaintiffs Don't*, 37 HARV. J. ON LEGIS. 393 (2000) and, more recently, David Rosenberg, *Mandatory-Litigation Class Action: The Only Option for Mass Tort Cases*, 115 HARV. L. REV. 831 (2002).

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and compensation.<sup>2</sup> Similarly, non-monetary remedies, including injunctions that prevent repetition of systematic, harm-inflicting conduct and corporate governance reforms of public companies, are also prevalent in the landscape of class action civil justice.<sup>3</sup>

Remedies obtained in class action law enforcement enhance social welfare inasmuch as they deter wrongdoing and induce corporations to closely align their conduct with the social interest in minimizing risk of harm or injury to consumers, investors, employees, residents, and other classes of similarly-situated individuals.<sup>4</sup> On a more general level, the magnitude and far-reaching effects of such monetary and non-monetary remedies demonstrate the intrinsic capacity of the class action mechanism to deter wrongful corporate conduct and practices and, ultimately, bring about desirable, welfare-enhancing social change.<sup>5</sup> The prevalent use of class actions does not remain free of criticism, however.<sup>6</sup>

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<sup>2</sup> See generally Kenneth W. Dam, *Class Actions: Efficiency, Compensation, Deterrence, and Conflict of Interest*, 4 J. LEGAL STUD. 47 (1975). See, e.g., *\$149M Bridgestone-Firestone Class Action Settlement Approved*, ASSOCIATED PRESS, March 15, 2004 (describing the \$149M class action settlement reached on behalf of Bridgestone-Firestone tire owners in connection with the tires' tread-separation problems and the resulting safety concerns).

<sup>3</sup> Class-wide settlements of securities fraud class actions often involve non-monetary remedies. Those include corporate governance measures that not only reduce the likelihood of future violations by the defendant company and its directors and officers, but also increase financial transparency, corporate accountability, and, ultimately, strengthen the legal protection afforded to investors.

<sup>4</sup> See generally David Rosenberg, *The Regulatory Advantage of Class Action*, in W. Kip Viscusi, (ed.), *REGULATION THROUGH LITIGATION* 244 (2002).

<sup>5</sup> See Greg Burns & Michael J. Berens, *Special Report: The Class Action Game*, CHICAGO TRIBUNE, March 7, 2004, at C1 ("class actions have reshaped the nation's economic and social landscape [... an] analysis of more than 300 state and federal class-action settlements over the past three years shows that nearly one-third prompted reforms of improper practices—from forced overtime to the use of inferior auto parts in repairs").

<sup>6</sup> Inevitably, the prevalent use of class actions to enforce the law across many sectors of the economy and society and, especially, the far-reaching economic effects of liability on corporate America, are the target of harsh criticism. The latter is repeatedly voiced by advocates of "tort reform" who, in addition sponsoring various studies, also invest resources in promoting legislative measures to curb allegedly-abusive class action practices. The basic tenets of the Republican "tort reform"

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That being said, and the scholarly literature notwithstanding,<sup>7</sup> the existing knowledge of *how* class actions function and *how* the use of that mechanism in the general scheme of law enforcement promotes deterrence of wrongdoing and compensation of harm—namely, two objectives that bear directly on the measure of individual well-being and social welfare—falls short of providing an adequately coherent theoretical

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manifesto are contained in Ed Gillespie & Bob Schellhas (eds.), *Contract with America: The Bold Plan by Rep. Newt Gingrich, Rep. Dick Armey, and the House Republicans to Change the Nation* (1994). Recent studies include, among others, *Excessive Legal Fees: Protecting Unsophisticated Consumers, Class Action Members, and Taxpayers* (Center for Legal Policy, Manhattan Institute, 1999). For further discussion see Walter Olson, *The Litigation Explosion: What Happened When America Unleashed the Lawsuit* (1991) and, more recently, Thomas F. Burke, *Lawyers, Lawsuits, and Legal Rights: The Battle over Litigation in American Society* (2002).

In the past decade, the efforts of “tort reform” advocates to constrain the class action bar have been most consequential in the context of securities class action litigation. See generally Edward J. Yodowitz *et al.* (eds.), *Securities Class Actions: Abuses and Remedies* (1994). Their effort led to the legislation of the Private Securities Litigation Reform Act of 1995, 15 U.S.C. § 77u-4 Stat. 2641 (1996), codified as amended at 42 U.S.C. § 1988(b). More recently, however, the contentious political debate over the proper role of class actions, the alleged abuses by plaintiffs’ attorneys, and “tort reform” more generally underlie the recently-proposed Class Action Fairness Act of 2004, a legislative measure that seeks to impose severe limitations on consumers’ access to justice in state courts as well as significant constraints on the ability to use the class action device to obtain redress for injured victims and deter systematic corporate wrongdoing. See Class Action Fairness Act of 2004, S. 2062, 108th Cong. (2004) and Class Action Fairness Act of 2003, H.R. 1115, 108th Cong. (2003).

<sup>7</sup> Insightful studies include, among others, John C. Coffee, Jr., *Understanding the Plaintiff’s Attorney: The Implications of Economic Theory for Private Enforcement of Law Through Class and Derivative Actions*, 86 COLUM. L. REV. 669 (1986); John C. Coffee, Jr., *The Regulation of Entrepreneurial Litigation: Balancing Fairness and Efficiency in the Large Class Action*, 54 U. CHI. L. REV. 877 (1987); Samuel Issacharoff, *Class Action Conflicts*, 30 U.C. DAVIS L. REV. 805 (1997); Jonathan R. Macey & Geoffrey P. Miller, *The Plaintiffs’ Attorney’s Role in Class Action and Derivative Litigation: Economic Analysis and Recommendations for Reform*, 58 U. CHI. L. REV. 1 (1991); David Rosenberg, *The Causal Connection in Mass Exposure Cases: A ‘Public Law’ Vision of the Tort System*, 97 HARV. L. REV. 851 (1984); David Rosenberg, *Individual Justice and Collectivizing Risk-Based Claims in Mass Exposure Cases*, 71 N.Y.U. L. REV. 210 (1996); and David Rosenberg, *Mandatory-Litigation Class Action: The Only Option for Mass Tort Cases*, 115 HARV. L. REV. 831 (2002).

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account on either descriptive or normative grounds.<sup>8</sup> Further, that the class action mechanism has occupied an increasingly dominant role in the landscape of civil justice ever since its introduction in 1966 makes such insights—and, correspondingly, the existing theoretical shortcoming—all the more consequential to enhancing social welfare.<sup>9</sup>

This intellectual shortcoming is a reason for concern because it effectively—and, indeed, inevitably—undermines society’s ability to make informed, welfare-enhancing policy decisions and choices. The ubiquitous lack of thorough understanding among state social-planners and federal policy-makers of the role of class actions in designing the system of public and private law enforcement and, more particularly, the role of (often derided) competent plaintiffs’ attorneys in protecting the interests of consumers, investors, employees, residents, and other classes of similarly-situated individuals against wrongful corporations increases the likelihood that ineffective legislative and regulatory measures are adopted and, in turn, make everyone in society—defendants, plaintiffs, victims of potential wrongs, and taxpayers—worse-off.<sup>10</sup>

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<sup>8</sup> For a brief review of the economic literature on class actions see Geoffrey P. Miller, *Class Actions*, in I THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 257 (Peter Newman ed., 1998).

<sup>9</sup> Rule 23 of the Federal Rules of Civil Procedure introduced in 1966 the modern form of the class action mechanism, which was predicated on its 1938 predecessor. See Harry Kalven, Jr. & Maurice Rosenfield, *The Contemporary Function of the Class Suit*, 8 U. CHI. L. REV. 684 (1941). Tracing its origins to seventeenth-century England, the history of the class action is reviewed in Deborah R. Hensler *et al.*, *Class Action Dilemmas: Pursuing Public Goals for Private Gain* 10-15 (2000). See also Zechariah Chafee, *Bills of Peace with Multiple Parties*, in SOME PROBLEMS OF EQUITY 149 (1950) (tracing the class action mechanism to the ancient, equitable “Bill of Peace,” a procedure that enabled multiple plaintiffs or defendants—referred to as the “multitude”—to resolve common issues of law and fact in a single action brought before the Court of Chancery). For further discussion of the evolution of the class action procedure see Stephen C. Yeazell, *From Medieval Group Litigation to the Modern Class Action* (1987).

<sup>10</sup> Analytically, sound theoretical understanding of class action law enforcement is necessary for designing effective social policy for two reasons: *First*, in order to be socially-desirable, policy prescriptions must identify the relevant welfare-enhancing determinants. Cf. Louis Kaplow & Steven Shavell, *Any Non-Welfarist Method of Policy Assessment Violates the Pareto Principle*, 109 J. POL. ECON. 281 (2001). *Second*, in order to be effective, legal reforms and regulatory measures must target—and possess a



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Against this intellectual backdrop and policy concerns, this Article advances a novel theory of class action law enforcement—*the option theory of class actions*—providing, in turn, the most conceptually-inclusive and analytically-accurate model of class action law enforcement and its underlying incentive structure. As demonstrated below, the option theory carries far-reaching implications for designing and implementing welfare-enhancing social policy on legislative, rule-making, and judicial levels.

The focal interest of the theoretical inquiry is in gaining insight into how the class action mechanism shapes the incentives of private agents—namely, competing plaintiffs’ attorneys and, subsequently, the court-appointed class counsel—and how the latter’s incentives affect the magnitude of liability exposure and, in turn, the deterrence and compensation effects of class action law enforcement. Stated more generally, the theoretical inquiry unravels the intricate effects of plaintiffs’ attorneys’ and court-appointed class counsel’s investment in class action law enforcement on the measure of individual well-being and aggregate social welfare in mass society.

The theoretical inquiry is predicated on two inter-related suppositions, both of which are strongly reinforced by real-world observations:

*First*, class action law enforcement is a resource-intensive undertaking, requiring investment by plaintiffs’ attorneys of both intellectual capital and financial wherewithal over a long period of time.

*Second*, broadly defined, the multi-stage sequence of investment in class action law enforcement begins with initial investment in detecting legally-actionable systematic, wrongful conduct and in identifying injured individuals or entities.<sup>11</sup> Further, the investment sequence encompasses

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functional capacity to affect—the respective incentives that bear impact on the attainment of the social objectives of law enforcement.

<sup>11</sup> Conserving on plaintiffs’ attorneys’ initial investment in detection and investigation, information concerning legally-actionable wrongful systematic conduct may become publicly available following public investigation into the alleged wrongful conduct (including, for example, Congressional hearings, enforcement proceedings taken by state and federal agencies, and grand jury proceedings) or following voluntary disclosure and possible admission by the alleged malefactor. Cf. Howard M. Erichson, *Coattail Class Actions: Reflections on Microsoft, Tobacco, and the Mixing of Public and Private Lawyering in Mass Litigation*, 34 U.C. DAVIS L. REV. 1 (2000) (discussing the SEC’s Law Enforcement Division

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investment in the ensuing case investigation; investment in developing alternative case theories to maximize the wrongdoer's liability exposure and preparation and filing of a class action complaint; and investment in obtaining the sought-after court-appointment as class counsel. The investment sequence subsequently entails investment in defeating pre-trial motions;<sup>12</sup> undertaking costly class- and merit-related discovery;<sup>13</sup> investment in securing certification of the action as a class action; publication of notice to class members, informing them of the pendency of the action, their right to appear before the court and, where relevant, their right to opt-out; and preparation of a trial plan and/or negotiation of a class-wide settlement. The lengthy, multi-stage investment sequence comes to its end with class counsel's investment in obtaining the court's approval of a proposed class-wide settlement, often over possible objections of third-parties, and award or approval of already-negotiated attorney's fees;<sup>14</sup> and, finally, administration and implementation of the class settlement, often including distribution of funds to class members.

Intertwining these conceptual observations into a cohesive model of class actions, the option theory conceptualizes the class action law enforcement enterprise as a financial call option. More concretely, building on insights developed in the standard economic theory of investment under conditions of uncertainty, the key theoretical proposition is that class action law enforcement is a complex form of investment, consisting of sequential, multi-stage options to invest under conditions of multi-dimensional uncertainty.

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investigation of fraudulent securities schemes and the Department of Justice Antitrust Division's investigation of Microsoft's antitrust violations).

<sup>12</sup> Pre-trial motions often include a motion to dismiss the class action complaint as well as a motion for summary judgment.

<sup>13</sup> Class-related discovery covers issues that bear on plaintiffs' motion to maintain (certify) their action as a class action pursuant to Rule 23(a)-(b) of the Federal Rules of Civil Procedure (or any parallel state rule); merit-related discovery covers issues that bear on the merits of plaintiffs' claims.

<sup>14</sup> Obtaining a court's approval of a proposed class-wide settlement may entail additional costly discovery—namely, confirmatory discovery—especially when an action is settled at a relatively early stage of the litigation. Confirmatory discovery operates as a form of “due diligence” and is designed to confirm that the terms of the settlements are adequate given the defendant's wrongdoing.

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The analysis reduces this theoretical proposition into an explicit and analytically-accurate model of class action law enforcement. To that end, it identifies the specific properties of investment in class actions across broad range areas of law where the class actions are used to enforce the law including, among others, antitrust, consumer protection and product liability, mass torts, securities and financial fraud, labor relations, and environmental protection. These properties include (i) investment expenditures shouldered by plaintiffs' attorneys; (ii) future rewards on investment, including attorney's fee award and reputation and learning benefits; (iii) the multi-dimensional investment uncertainty, including cost-uncertainty and reward-uncertainty; (iv) the irreversibility of investment expenditures, namely, the problem of sunk cost and the inability to disinvest should expected expenditures or expected rewards change so as to render further investment inefficient and thus unwarranted; and (v) the sequential, multi-stage property of investment opportunities and investment decisions.

The final building block of the model concerns the judicial screening of competing plaintiffs' attorneys followed by judicial selection and appointment of class counsel at a relatively early part of the sequence. The selection of class counsel is conceptualized, under the model, as judicial assignment of a monopoly over options to invest in class action law enforcement to the appointed class counsel. The appointment of class counsel thus demarcates a clear temporal watershed, differentiating between the competitive phase (and investments decisions made in that phase) and the monopolistic phase (and investments made in that phase) of the class action investment sequence.

Thus structured, the option theory offers novel descriptive insights that significantly enhance the existing understanding of class action law enforcement. These insights, as I show below, are germane to designing welfare-enhancing social policy and making sound policy choices.

*First*, having conceptualized the class action law enforcement enterprise as a multi-stage sequence of options to invest under conditions of multi-dimensional uncertainty, it becomes readily apparent that decisions made by plaintiffs' attorneys and, subsequently, by the court-appointed class counsel are nothing but—and, indeed, boil down to—sequential investment decisions under uncertainty.

*Second*, at any given stage of the investment sequence (but for the last one), plaintiffs' attorneys and, later, the court-appointed class counsel

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face a *financial call option*, namely, an option to invest and “buy,” with some probability, the option to invest that follows in the sequence. Put another way, the immediate payoff from investment at any given stage of the sequence is obtaining the option to invest in the stage that follows in the sequence. These sequential payoffs lead, with some probability, to the ultimately payoff in the form of attorney’s fee awards.

*Third*, plaintiffs’ attorneys and, subsequently, the court-appointed class counsel must complete the multi-stage investment sequence in order to obtain monetary rewards on their investment. In other words, they must invest in *each* investment opportunity—namely, exercise sequential financial call options throughout the completion of the sequence—before the material rewards on investment are realized in the form of often lucrative attorney’s fees award.<sup>15</sup>

*Fourth*, the magnitude incentives to invest and the investment decisions plaintiffs’ attorneys and, later, the court-appointed class counsel make throughout the investment sequence are the most important determinant of the magnitude of liability exposure and, in turn, of the magnitude of deterrence effects and compensation outcomes of class action law enforcement.

Combined, these insights unravel the investment structure of class action law enforcement and invite – and, indeed, facilitate – the application of well-established decision-making methods developed by investment theorists. Applying these methods to options to invest and corresponding investment decisions in class actions is enlightening primarily because investment decisions made by plaintiffs’ attorneys and, subsequently, by the court-appointed class counsel – which are the most important determinant of the magnitude of liability exposure and, in turn, of the magnitude of deterrence effects and compensation outcomes of

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<sup>15</sup> Attorneys’ fee awards do not encapsulate the entire payoff from investment in class action law enforcement for, in addition to the monetary payoff, investment in class actions may entail significant *learning* and *reputation* benefits. Unlike attorney’s fee awards, benefits from learning are forward-looking because learning builds expertise and therefore enables plaintiffs’ attorneys to perform similar tasks in the future at lower average cost (that is, at a lower level of intellectual or financial investment). Benefits from reputation are also forward-looking because, in the context of class action litigation, good reputation may increase the likelihood of obtaining the sought-after court appointment as class counsel and may also lead the court to award higher attorney’s fees.

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class action law enforcement – become, for the first time, predictable and amenable to rigorous positive and normative analyses.<sup>16</sup>

Viewed from a normative vantage point, the option theory and the methods developed by investment theorists provide the tools and requisite intellectual underpinnings to designing sound investment-oriented regulatory measures (including legislative and rule-based measures as well as judicial rule-making) that focus on the properties of investment in class action law enforcement and shape incentives to invest and investment decisions in socially-desirable ways. For example, it is desirable for the social planner to design regulation to encourage investment in meritorious claims and, at the same time, discourage any investment in prosecution of frivolous claims.<sup>17</sup> Policy-makers and courts

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<sup>16</sup> Option pricing, a method that was developed in the academic literature on investment, is a rigorous analytic tool that is used to determine (i) *whether* exercising an option to invest is desirable; (ii) *what* is the efficient level of investment; (iii) *when* is it best to exercise the option and invest; (iv) *what* is the minimum expected reward on investment that is sufficient to trigger the exercising of an option and investment throughout the multi-stage sequence; (v) *how* does the cost of investment affect investment decisions; and (vi) *how* does uncertainty and the length of the investment sequence affect investment decisions.

<sup>17</sup> Stated more generally, regulatory intervention in class action law enforcement ought to bridge or, at least, seek to minimize the divergence of private incentives to invest (namely, the incentives of plaintiffs' attorneys) from the social optimum. Private incentives to invest in class actions are bound to be excessive (supra-optimal) or insufficient (sub-optimal) compared with the social optimum. *See generally* Steven Shavell, *The Fundamental Divergence between the Private and Social Motive to Use the Legal System*, 26 J. LEGAL STUD. 575 (1997) (discussing the private-social divergence of incentives underlying the decision to bring suit, invest in litigation, and settle suit); Steven Shavell, *The Social versus the Private Incentive to Bring Suit in a Costly Legal System*, 11 J. LEGAL STUD. 333 (1982) (discussing the private-social divergence in bringing suit).

The private-social incentive divergence is a broadly-observed phenomenon, cutting across all contexts of social activity, including litigation, manufacturing, the use of motor vehicles, and like activities. This intrinsic divergence results from the general problem that decisions made by private actors do not take account of the positive or negative effects of their decisions (*i.e.*, positive and negative externalities, respectively) on the well-being of others and the welfare of society more generally. The analysis of this problem and its implication for social policy are presented in Arthur Cecil Pigou, *The Economics of Welfare* (5th ed., 1952).

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ought to be mindful of the fact that (i) any decision made by plaintiffs' attorneys and, later, by the court-appointed class counsel is nothing but—and, indeed, boils down to—an investment decision; and (ii) the magnitude incentives to invest and investment decisions ultimately made are the most important determinant of the magnitude of liability exposure and, in turn, the magnitude of deterrence and compensation effects of class action law enforcement.

The normative appeal of the option theory arises from (in addition to its conceptual-inclusiveness and analytic-accuracy) its capacity to prescribe welfare-enhancing legal reforms and regulatory measures that focus on any of the various properties of investment in class actions, including (i) the magnitude of investment expenditures, (ii) the magnitude of future rewards on investment (fee awards), (iii) the level of investment uncertainty, (iv) the irreversibility of investment expenditures (the problem of sunk cost), and (v) the sequential, multi-stage property of investment decisions. Ultimately, regulatory measures that utilize the insights above can affect the magnitude of deterrence and compensation outcomes of class action law enforcement and, consequently, bear significant impact on individual well-being and social welfare more generally.

On the whole, the option theory seems to have accomplished a threefold objective: *First*, the theory responds to—and, indeed, fills—the critical shortcoming of the academic literature on class actions including, among others, economic oriented analyses for, notwithstanding its voluminous nature, scholarly studies have failed to provide any comprehensive theory of the structure or functioning of class actions as a law enforcement mechanism. *Second*, the theory advances a rigorous, conceptually-inclusive analytic framework and offers novel insights that, taken together, provide the requisite intellectual underpinnings for social policy analyses of class action law enforcement.<sup>18</sup> The option theory

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<sup>18</sup> On a more general level, however, the option theory of class action law enforcement provides a comprehensive conceptual framework, necessary to identifying and analyzing a variety of problems arising in the context of class actions. Specifically, owing to its general property, this conceptual framework is capable of capturing the numerous investment decisions that are made throughout the process of class action law enforcement, ranging from the initial investigation, to bringing a lawsuit, undertaking discovery, and culminating in settlement negotiations. As such, the theory is all but germane to undertaking descriptive analyses of the effects

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provides a conceptually-inclusive analytic framework that is capable of disentangling the myriad and diverse aspects of class action law enforcement and reducing them to investment problems under conditions of uncertainty. Virtually any aspect relating to the performance and conduct of plaintiffs' attorneys and, later, class counsel in the course of class action law enforcement becomes amenable to uniform analysis as an investment problem. *Third*, the theory sets guidelines for designing effective regulatory measures across the diverse areas of law where class actions are used to enforce the law.

Finally, the option theory developed in this Article bears on the directions of the future study of class action law enforcement. The theory shows that further inquiry into the determinants of the magnitude of incentives to invest and, correspondingly, the possibility of different forms of regulatory intervention to induce socially-desirable incentives to invest in law enforcement is not only warranted but, indeed, is consequential to crafting desirable, welfare-enhancing social policies.

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The analysis is organized in the following order: Section II presents a short primer on the standard economic theory of investment under uncertainty. In addition to considering the definition of investment, investment expenditures, future rewards on investment, and investment uncertainty, close attention is given to the "option approach" to investment decision-making as well as to sequential investment opportunities. Building on the concepts of investment theory, the discussion in Section III gradually develops the option theory of class action law enforcement. Explicitly identifying the properties of investment in class actions, attention is given to (i) the investment expenditures shouldered by plaintiffs' attorneys; (ii) the future rewards on investment, including attorney's fee award as well as reputation and learning benefits; (iii) the multi-dimensional investment uncertainty, including cost-uncertainty and reward-uncertainty; (iv) the irreversibility of investment expenditures; and (v) the sequential, multi-stage property of investment opportunities and investment decisions. Section IV focuses on the judicial appointment of class counsel at the earlier part of the sequence

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of legal regulation on the magnitude of liability and deterrence outcomes and to prescribing efficient, normative regulatory measures that may be necessary to enhance social welfare effects of class action law enforcement.

and models it as a judicially-granted monopoly over options to invest in class action law enforcement. Section V derives normative implications and sets forth policy guidelines for designing investment-oriented legal reform and welfare-enhancing regulatory intervention. To conclude, Section VI points out the direction for future study of class action law enforcement.

## II. FOUNDATIONS OF THE STANDARD ECONOMIC THEORY OF INVESTMENT UNDER UNCERTAINTY

This Section presents the foundations of the standard economic theory of investment under conditions of uncertainty. Geared toward developing the option theory of class action law enforcement, which I gradually develop below,<sup>19</sup> I deliberately pay specific attention to the “option approach” to investment decision-making and consider the case of sequential investment opportunities.<sup>20</sup> Gaining understanding of these issues is all but significant, as the premises and insights developed by investment theorists underlie the general investment theory of class action law enforcement that I advance below.

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<sup>19</sup> The conceptual foundations and analytic dimensions of the option theory are developed throughout the discussion in Sections III and IV below.

<sup>20</sup> As explained in great detail below, the “option approach” to investment decision-making is preferable to the ordinary net present value (NPV) rule in the context of class action law enforcement. This is because it has long been recognized that the simple NPV rule for deciding whether to invest in an investment opportunity can provide unambiguously correct answers only under certain conditions. When these conditions are not met—namely, (i) where the investment decision can be delayed, (ii) where the investment is not fully reversible, and (iii) where the investment uncertainty is likely to be resolved and affect the value of the investment opportunity—relying on the NPV rule to determine whether and how much to invest may not be optimal even where the NPV is positive.

A general discussion of the implications of investment irreversibility and the effects of the resolution of uncertainty on investment decision-making is contained in Robert S. Pindyck, *Irreversibility, Uncertainty and Investment*, 29 J. ECON. LIT. 1110 (1991). See also Lenos Trigeorgis, *Real Options* (1996).



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### **A. *The Definition of Investment***

Investment is defined as the act of incurring immediate cost, in expectation for future rewards.<sup>21</sup> Investment decisions are ubiquitous and are by no means limited to investment in financial markets. The decision to obtain college education, for example, clearly falls within the definition of investment. The cost of tuition, related expenses, and opportunity costs may be presently incurred in expectation of future benefits in the form of a well-paid occupation. Firms' expenditures on R&D, in an attempt to develop a new, profitable product or otherwise gain a competitive advantage in the market, similarly qualify as a form of investment.<sup>22</sup>

In the discussion that follows below I explicate the foundations of the economic theory of investment.<sup>23</sup>

### **B. *Investment Expenditures, Future Rewards, And Investment Uncertainty***

The cost incurred in investment may entail different types of resources, including financial wherewithal as well as intellectual and human capital. It is important to note that, by and large, investment decisions are completely or partially irreversible. That is, the initial cost incurred by the investor is sunk, at least to some extent, such that the investor cannot recover it all or in part (*i.e.*, disinvest) should she later change her mind and decide to withdraw from the investment project.

A further characteristic, commonly shared by investment opportunities, is the existing of uncertainty over the magnitude of investment expenditures or over the magnitude of future rewards from investment. This means that, at best, the investor may be able to assign

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<sup>21</sup> See Joel G. Siegel and Jae K. Shim, *Dictionary of Accounting Terms* 242 (3rd ed., 2000) (hereinafter: Siegel and Shim, *Dictionary of Accounting Terms*) ("expenditure to acquire property, equipment, and other capital assets that produce revenue").

<sup>22</sup> Additional examples include firms' decision to enter (or exit) an industry; the determination of initial scale of production; construction of a production plant (or temporary shutdown); the decision to hire (or layoff) employees; the purchase of insurance; and the like.

<sup>23</sup> The foundations of investment theory, explicated in this Section, are based primarily on Avinash K. Dixit & Robert S. Pindyck, *Investment Under Uncertainty* 3-25 (1994) (hereinafter: Dixit & Pindyck, *Investment Under Uncertainty*).

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probabilities to alternative, future outcomes, which may entail greater or smaller expenditures or rewards.<sup>24</sup> Further, uncertainty may pertain to different dimensions on which the availability and magnitude of future rewards is likely to depend. In the case of firm's investment in R&D, for example, future rewards are contingent on (i) the prospects of developing a new product, (ii) the volatility of demand for such product and the price ultimately obtained, and (iii) the possibility that similar product will also be developed by competing firms in the market. Obviously, there may be some level of uncertainty over each of these discrete conditions.

In view of such uncertainty, the investor may decide to postpone its investment decision until further information is obtained and the level of uncertainty is accordingly reduced (though, never completely).<sup>25</sup> Having done so—and assuming that the investment opportunity is still available to her—the investor will be better-situated to evaluate her investment opportunity and make her investment decision appropriately.

### *C. The “Option Approach” to Investment Decision-Making*

Combined together, these investment characteristics—namely, (i) the irreversibility of investment (*i.e.*, sunk cost), (ii) uncertainty over future outcomes, and (iii) the choice of timing of investment decision—interact to determine investment decisions made by investors.<sup>26</sup> But how,

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<sup>24</sup> Not all investment decisions are made under conditions of uncertainty, however. For some investments, the availability of future rewards is a matter of certainty, such that their scope and magnitude are *ex ante* known to investors. These conditions are satisfied, for example, in the case of investment in bonds, where the rate of return on investment is specified *ex ante*.

<sup>25</sup> Clearly, there may be cost to delaying investment decisions, in terms of losing the opportunity to make the investment in the future, and the consequent lost profits. The opportunity to invest may not be available because, for example, the time-window for making investment has lapsed, or because a competing investor has used this opportunity. Hence, there may be occasions in which strategic considerations would induce firms to invest earlier than they would have done otherwise, for example, when they wish to forestall investment by potential or actual competitors.

<sup>26</sup> Neoclassical investment theory applies a simple decisional rule, focusing on the *net present value* (NPV) of investment project, to solve investment decision-making problems. Specifically, the present value of the expected future stream of profits from investment is calculated first. Next, it is necessary to calculate the

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specifically, are investment decisions made? In order to answer this key question, we first need to consider the economic structure of investment opportunities more closely.<sup>27</sup>

An investment opportunity provides an investor with an “option,” analogous to financial call option. That is, the investor has the right but not the obligation to purchase an asset—the investment opportunity—within some period of time, at a given price.<sup>28</sup> When the investor decides to purchase the asset—that is, to make irreversible investment expenditures and obtain in return an investment project—she “exercises” her option to purchase the underlying asset and thereby gives up the possibility of delaying her decision until further information is obtained. The option to wait is valuable, however, precisely because the future value of the asset purchased may be uncertain. By postponing an investment decision, the investor can obtain further information; if it

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present value of the expenditures incurred in this investment. Finally, the two values are compared, such that if the difference is positive – that is, there is *net present value* – the investment is efficient. In other words, the NPV rule means that incremental (or marginal) investment should be made until the marginal return on investment equals its marginal cost.

The NPV approach to investment decision-making underlies the  $q$ -theory of investment, which compares the capitalized value of marginal investment to its purchase cost. This ratio, called Tobin’s  $q$ , governs the investment decision; investment is efficient if  $q$  exceeds 1, and vice versa, when  $q$  is less than 1.

<sup>27</sup> The NPV approach to investment decision-making is insufficient, as it ignores significant investment characteristics. In particular, the NPV rule implicitly assumes that either the investment is reversible, or, if it is irreversible, that investors have no choice over the timing of investment (that it, it is a now-or-never opportunity). These characteristics of investment opportunities, however, can significantly affect the decision to invest.

By contrast, the theory of irreversible investment under uncertainty, developed by Dixit and Pindyck, takes explicit account of these investment characteristics and provides, therefore, a more inclusive conceptual and analytical framework to analyze investment problems. See Dixit & Pindyck, *Investment Under Uncertainty*, *supra* note 23, at 6 *et seq.* The discussion below demonstrates that such framework is indeed germane to the analysis of class action law enforcement.

<sup>28</sup> Call option is defined as the right to buy (or call) an asset at a specified price within specified period of time. See Siegel and Shim, *Dictionary of Accounting Terms*, *supra* note 21, at 60, 313.

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shows that the asset rises in value then the net payoff from investment rises and, conversely, if the asset decreases in value, the investor need not exercise its option.

Because the future value of an investment project may be uncertain at any given time—and given that investment expenditures are largely or completely irreversible, such that once expended they are largely or completely sunk<sup>29</sup>—availability of further information could affect the desirability and timing of investment expenditure and, ultimately, the decision to invest. For this reason, the option to postpone an investment decision until additional information becomes available is valuable to the investor.

The value of the option to delay an investment decision is lost once an investment decision is made, however. Having made the investment, the investor would not be able to disinvest (*i.e.*, recoup its expenditures) or alter the timing of investment, even if further, crucial information would later become available to her. The lost option value is therefore a type of opportunity costs—arising from forfeiting the opportunity to postpone the investment decision—and, hence, must be included in the total cost of investment at any given point of time where investment decision is being made.<sup>30</sup>

Investment decision-making, then, ought to take account of three different variables, namely (i) investment expenditures (*i.e.*, the present value of the stream of future costs); (ii) expected future rewards (*i.e.*, the present value of the future stream of profits); and (iii) the lost value of the option to invest (*i.e.*, the opportunity cost of investment at any given point of time). The investment decisional rule implies that *investing in an investment opportunity is efficient if the rewards on investment are at least as large or exceed the total sum of investment expenditures and the lost option value.* Put differently, for investment to be efficient, profits obtained must exceed

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<sup>29</sup> That the expenditure is sunk cost stems from the fact that the investor cannot disinvest should relevant conditions change and render the project unprofitable.

<sup>30</sup> The magnitude of these opportunity costs is sensitive to uncertainty over future profits from investment, such that the more uncertain profits are the more valuable is the option to postpone the investment until further information is available to reduce uncertainty and, hence, the higher are the opportunity costs of making present, irreversible investment expenditures.

the cost of investment expenditures by an amount equal to or larger than the value of keeping the option to invest alive.

**D. Sequential Investment Opportunities**

In this Section I consider the case of sequential investment opportunities. Some investment projects may comprise several investment stages, all of which must be completed in a particular sequence before future profits are realized.<sup>31</sup> Yet, the number of investment stages in a given sequence may vary across different investment projects.<sup>32</sup> As these projects entail several stages, investors face a sequence of discrete investment decisions.<sup>33</sup> At each stage of the sequence, the investor can decide to (i) move on and invest in the next stage of the sequence, (ii) halt further investment temporarily, or (iii) terminate its investment altogether and withdraw from the project.

While sequential investment decision-making is somewhat more complex than the investment rule I have discussed earlier, it nevertheless relies on the same principles. In essence, we approach this investment problem by bifurcating the multi-stage investment sequence into its discrete investment stages, and treat each stage as a single investment problem. Given the existence of an investment sequence, the investor's

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<sup>31</sup> This is in contrast to discrete, single-stage investments, which involve a single investment decision. The purchase of securities in the stock market provides one such example. Yet, even projects that appear to involve a single investment decision may turn out to include a sequential investment. This may be the case in projects that span over a long period of time before they are complete, such that at any point of time the firm can decide to stop midway, abandon the project altogether, or continue.

<sup>32</sup> Investment by a pharmaceutical company in developing a new drug is surely a multi-stage, investment project. The sequence of investment stages begins with research aimed at discovering a new compound; it continues with testing until FDA approval is obtained; further, it requires building a production facility; and finally, it necessitates investment in marketing. See Dixit & Pindyck, *Investment Under Uncertainty*, *supra* note 23, at 319-20.

<sup>33</sup> Sequential investments may involve uncertainty over several variables, including uncertainty over future rewards on investment (that is, uncertainty over the value of the completed project) in addition to uncertainty over the cost of future investment stages.

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investment in stage one “buys” (or “produces”) an option to invest in stage two of the sequence, and so forth until the project (*i.e.*, the investment sequence) is completed. Thus, the payoff on investment at stage one (and, similarly, the payoff on investment at any discrete stage of the sequence thereafter) is the value of the option to invest in stage two (or at any following stage of the sequence). The investment decision at stage one (and, similarly, at any following, discrete stage) boils down to a cost-benefit analysis, where the cost variable consists of (i) the sum of investment expenditures remained to be made throughout the sequence,<sup>34</sup> and (ii) the value lost in exercising the option to invest in the first stage, while the benefit variable comprises the value of the option to invest in stage two of the sequence.<sup>35</sup>

Based on this discussion, the following observations are readily available:

*First*, as the investor gradually moves forward in the investment sequence and fewer stages are left to the full completion of the investment project, (i) the sum of expenditures that remains to be made becomes smaller<sup>36</sup> and (ii) the value of option to invest becomes greater.

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<sup>34</sup> Intuitively, the sum of expenditures, which remain to be made throughout the investment sequence, must be taken into account at each discrete investment decision throughout the sequence, because the efficiency of discrete investment decisions depends on the aggregate project. See Dixit & Pindyck, *Investment Under Uncertainty*, *supra* note 23, at 325.

To exemplify this point, imagine the three-stage investment in becoming a practicing lawyer. The first stage includes investment in obtaining a college degree; the second stage includes investment in obtaining legal education; the third and final stage requires investment in sitting to the bar. Assume that these investments are sunk, in the sense that their costs cannot be recovered in any way other than practicing law (*i.e.*, a college or law school degree cannot produce any profits otherwise). Assume also that the rewards on this investment stem exclusively from the income obtained (that is, no non-economic attributes, such as prestige, are taken into account). Given this set of assumptions, it would be inefficient to invest at stage one if expected profits are lower than *aggregate* cost of investment.

<sup>35</sup> The value of the option to invest is derived from the value of the completed project (*i.e.*, the ultimate profits on investment).

<sup>36</sup> If, however, there is uncertainty over the magnitude of future investment expenditures, then the absolute (rather than the fractional) magnitude of this sum may rise.

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*Second*, it follows that as more sequential investment stages have been completed in the sequence, smaller expected future rewards would be sufficient to render investment in the following stage an efficient investment (and vice versa).<sup>37</sup>

*Third*, the longer is the investment sequence, higher expected future rewards are necessary to compensate for discount rates and induce the investor to invest.<sup>38</sup>

*Fourth*, the higher the level of uncertainty over the magnitude of future rewards on investment, the lower is the value of the completed project and the lower is the value of option to invest. Similarly, the higher the level of uncertainty over the magnitude of future rewards on investment (and, hence, the lower is the value of the completed project), the higher are the opportunity costs of investment at any given stage of the sequence.<sup>39</sup>

*Fifth*, at any stage of the sequence the investor can stop investing if the value of the completed project decreases, or if the expected aggregate cost of completing it increases.

In the discussion that follows below I build on the insights that were developed in the theory of investment under uncertainty and on the observations I have made above to advance a general investment theory of class action law enforcement.

### **III. THE OPTION THEORY OF CLASS ACTION LAW ENFORCEMENT**

The foregoing discussion has advanced the proposition that the class action mechanism is uniquely designed to rectify impediments to optimal

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<sup>37</sup> Put differently, the higher is the sunk cost required to obtain a risky payoff the higher is the critical value of this payoff to induce efficient investment.

<sup>38</sup> Indeed, some investment projects—*e.g.*, investment in developing a new drug—may span over a long period of time. The discount rate applied, however, depends on firm-specific characteristics.

<sup>39</sup> In other words, the higher the level of uncertainty, the more valuable is the possibility to postpone investment decisions until further information is obtained. See also Carliss Y. Baldwin, *Optimal Sequential Investment when Capital is Not Readily Reversible*, 37 J. FINANCE 763 (1982) (showing that there is economic value to waiting).

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law enforcement<sup>40</sup> that arise from the fundamental divergence between private and social law enforcement incentives.<sup>41</sup> While the class action mechanism provides the capacity to address the problem of sub-optimal law enforcement, its functional capacity is all but a necessary, albeit an insufficient, condition to obtaining optimal deterrence through class action law enforcement.<sup>42</sup> For it is necessary to distinguish between the functional aspect of class action law enforcement, on the one hand, and the incentive structure, on the other, one that involves private agents' incentives to use the class action mechanism.<sup>43</sup>

In view of the class action functional capacity to address impediments to optimal law enforcement, the key question is therefore the following one: *How do the incentives of private agents in class action law enforcement affect the magnitude of liability outcomes and deterrence effects obtained through class actions?*

In general, the magnitude of liability outcomes and deterrence effects of class action law enforcement—and the consequent social welfare effects—depend not only on the functional capacity of the class action mechanism to address impediments to optimal law enforcement but, equally, on the incentives of private agents, in whose hands class action law enforcement is entrusted as a matter of institutional design. Identifying these incentives and gaining insights into the effects they bear on the level of class action law enforcement in addition to their impact on the magnitude of liability outcomes and deterrence effects, is therefore of prime theoretical concern. The theoretical inquiry that follows below deals precisely with this aspect of class action law enforcement. Based on

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<sup>40</sup> The design of the class action mechanism, comprising (i) an opportunity to exploit economies of scale benefits and (ii) economic entrepreneurship, is analyzed in Halfteck, *The Class Action Enterprise*, *supra* note 1, Part III(A)-(C).

<sup>41</sup> That the divergence between private and social law enforcement incentives results in sub-optimal level of law enforcement is discussed in Halfteck, *The Class Action Enterprise*, *supra* note 1, Part II(C)(1)-(3).

<sup>42</sup> Simply put, that private law enforcement agents may make use of the class action functional capacity to obtain law enforcement outcomes, by no means suggest that agents will indeed be optimally motivated to utilize class action.

<sup>43</sup> As the discussion shows, agents' incentives to use the class action mechanism are affected by several factors, including the structural design of the class action mechanism, the economic environment in which agents are situated, and the like.



the descriptive insights gained, it would later become possible to consider the desirability of regulatory intervention, which may be necessary to align the incentives of private agents with the social interest in employing the liability system through class action law enforcement.

**A. *Class Action Law Enforcement: An Investment Opportunity under Conditions of Uncertainty***

The basic theoretical proposition that class action law enforcement comprises, in essence, an investment opportunity under conditions of uncertainty appears to be rather straightforward.<sup>44</sup> The class action device provides plaintiffs' attorneys—and plaintiffs' law firms more generally—with an opportunity to undertake class action law enforcement and invest financial and intellectual resources in the prosecution of claims on behalf of a pool of similarly-situated, disperse victims, in exchange for the prospects of collecting often-lucrative returns on their investment.<sup>45</sup> To

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<sup>44</sup> A class action lawsuit in which the plaintiff attorney invests her resources is all but a capital asset, which carries the prospects of generating revenues and neatly falls within the economic definition of investment. Yet, while the class action device creates a quadripartite structure—including the plaintiff class, the plaintiff attorney, the defendant and the court—the theory focuses primarily on plaintiff attorneys, not on the plaintiffs themselves or any other party taking part in class action law enforcement, due to intrinsic features of the class action device itself. Specifically, class action law enforcement is paradigmatically designed to provide a solution to a collective action problem running afoul the otherwise best interests of a dispersion of numerous, similarly-situated wronged victims. For this reason, the class action device entrusts the initiative within the hands of plaintiff attorneys. Acknowledging their decisive role in class action law enforcement, the theory developed in this Article focuses on plaintiff attorneys' law enforcement incentives as they are formed by the class action mechanism.

<sup>45</sup> In that respect, the plaintiff attorney could well be portrayed as an entrepreneur, committing her resources to using the class action device as a mere business venture. Cf. Mike France, *The Litigation Machine*, BUSINESS WEEK, Jan. 29, 2001 (describing lawyer-driven tort litigation in the US as becoming an all-but-automated process, made possible in large part, due to the availability of litigation-support institutions serving the plaintiff bar which provide litigation-related information and finance). It goes without saying, however, that portraying plaintiff attorneys as mere profit-seeking entrepreneurs runs afoul notions of public interest litigation that plaintiff attorneys ascribe the type of work they engage in, often characterized as public- or civic-minded litigation.

better understand the general validity of this proposition, however, it is necessary to identify the investment features that are embedded in class action law enforcement. Those include (i) investment expenditures; (ii) the prospect of future rewards on investment; (iii) multi-dimensional investment uncertainty over the cost and benefit variables of the investment opportunity (*i.e.*, cost- and price-uncertainty, respectively); and (iv) the irreversibility of investment expenditures (*i.e.*, the problem of sunk cost).<sup>46</sup> The sequential, multi-stage property of investment in class action law enforcement is subsequently analyzed in Section B.

**1. *Investment Expenditures: The Private Cost of Class Action Law Enforcement***

From the perspective of plaintiffs' attorneys, class action law enforcement entails two distinct types of investment expenditures.<sup>47</sup> These include (i) investment of legal services, *i.e.*, human and intellectual capital,<sup>48</sup> and (ii) investment of financial wherewithal, *i.e.*, the cost incurred throughout the law enforcement process.<sup>49</sup> While investment of legal services is intrinsic to the legal expertise proffered by plaintiffs' attorneys, investment of financial wherewithal is definitely not. Rather, the role of plaintiffs' attorneys in advancing and investing capital that is necessary to undertake class action law enforcement inheres in the design of the class action mechanism itself as a corrective social policy in response to insufficient private incentives to employ the liability system. Thus, the fact that plaintiffs' attorneys assume an entrepreneurial,

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<sup>46</sup> The definition and components of investment opportunities are expounded in Section II above.

<sup>47</sup> The plaintiff attorney may fine-tune her level of investment by making incremental adjustments to its investment of legal services and financial wherewithal.

<sup>48</sup> The investment of legal services, through human and intellectual capital, equals to the attorney's opportunity costs of deciding to invest in class action law enforcement.

<sup>49</sup> The structure of this investment obviously involves a social cost component as well, as class action law enforcement imposes significant administrative costs on the legal system itself, which are not carried by plaintiff attorneys.

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venture-capitalist role stems precisely from the institutional choice that is coupled in the design of the class action mechanism.<sup>50</sup>

The magnitude of both types of investment expenditures may vary across different cases of class action law enforcement. Depending on case-specific characteristics, class action law enforcement may require extensive investment of legal services, in particular, where the prosecution of claims involves novel legal theories or where the case calls for the application of unsettled legal doctrines. Similarly, where the case entails vast and intricate factual issues,<sup>51</sup> such as where an expansive discovery campaign and costly scientific studies are necessary to establish the defendant's liability,<sup>52</sup> considerable investment of legal services may certainly be required.<sup>53</sup> Lastly, onerous class action procedures may also entail a significant investment in legal services.

Likewise, the magnitude of capital investment may tremendously differ from one case to another, depending on a number of factors. The availability of public information on the alleged wrongdoing or the harm inflicted on individual victims is certainly one such key variable. Indeed, the information problem is often of considerable dimensions, given that victims' incentives to seek recovery and thereby provide relevant

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<sup>50</sup> The entrepreneurial property of class action law enforcement is discussed in Halftack, *The Class Action Enterprise*, *supra* note 1, Part III(B).

<sup>51</sup> The sheer magnitude and complexity of the "Agent Orange" litigation, brought on behalf of Vietnam veterans and their families, the consortium of plaintiffs' attorneys had to "constantly litigate discovery motions, examine and digest millions of documents in the government's and defendants' files throughout the country, organize and computerize their document base, identify and interview expert witnesses, and prepare their own witnesses for pretrial depositions." See Peter H. Schuck, *Agent Orange on Trial: Mass Toxic Disasters in the Courts* 84 (Enlarged ed., 1987).

<sup>52</sup> When appropriate, expansive discovery campaigns may involve numerous depositions, extensive interrogations, and the filing of frequent discovery motions, all of which are necessary to establish the factual basis—and hopefully find the "smoking gun"—underlying the prosecution (or settlement) of claims on behalf of the class of victims.

<sup>53</sup> In addition to investment of legal services, expansive discovery campaigns often require substantial investment of capital resources.

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information (as is the case with low-value claimants)<sup>54</sup> or their incentives to invest in obtaining such information (as is the case with high-value claimants),<sup>55</sup> are largely insufficient and thus cannot be relied upon to yield sufficient and relevant information for the purpose of law enforcement. In addition, the problem of long latency periods—that often arise in the context of mass toxic torts—and the strong incentives of corporate wrongdoers to invest efforts in concealing their wrongful conduct to reduce liability exposure, suggest that plaintiffs’ attorneys need often invest resources in extensive forensic investigation.

Further, the size of the pool of similarly-situated victims—and how disperse they are, both geographically and temporally—also affects the magnitude of capital expenditures that may be required to aggregate and consolidate victims into a cohesive, unified pool in order to bring a class action suit on their behalf.<sup>56</sup> Additional variables that are likely to bear impact on the magnitude of capital expenditures incurred in the course of class action law enforcement include the time period over which the litigation extends; the complexity of the factual issues on which the plaintiffs’ theory depends; and the need for expert testimony or related scientific studies to establish the relevant etiology and hold the defendant liable to the harm caused.

The magnitude of costs incurred by plaintiffs’ attorneys through the process of class action law enforcement also include expenditures that are incurred in the course of complying with orders that are issued by the trial court in the course of the litigation. Specifically, class action procedure requires that notice is given to putative class members in opt-out class actions,<sup>57</sup> informing them of their right to request exclusion from

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<sup>54</sup> The insufficient incentives of victims with low-value claims to seek recovery and thereby provide information that is relevant to bringing law enforcement actions are analyzed in Halfteck, *The Class Action Enterprise*, *supra* note 1, Part II(C)(1).

<sup>55</sup> The insufficient incentives of victims with high-value claims to invest in obtaining enforcement-specific information are analyzed in Halfteck, *The Class Action Enterprise*, *supra* note 1, Part II(C)(2).

<sup>56</sup> Yet, this may also depend on the type of notice that the court requires, for in some cases lesser notice is deemed sufficient such that less cost needs to be incurred.

<sup>57</sup> Class members are entitled to opt-out of a plaintiffs’ class only in pending actions, certified as class actions under Rule 23(b)(3). Under Rule 23(d)(2), however, the court can exercise its general, discretionary authority to order that class notice is

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a certified class action (opt-out),<sup>58</sup> and advising them that unless they opt-out, they will be bound by any judgment, whether favorable to the class or not.<sup>59</sup> While it is for the court to order the “best notice practicable under the circumstances, including individual notice to all members who can be identified through reasonable effort,”<sup>60</sup> the cost of giving such notice is borne by plaintiffs’ attorneys and may certainly be substantial.<sup>61</sup>

Additional costs that plaintiffs’ attorneys may have to incur are those costs that are imposed by courts when a dismissal or settlement of a class action suit is sought<sup>62</sup> or otherwise arising from specific class action

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given—“for the protection of the members of the class or otherwise for the fair conduct of the action”—regardless of whether the class was certified under Rule 23(b)(3) or otherwise. *See* Barahona-Gomez v. Reno, 167 F.3d 1228, 1236 (9th Cir. 1999) (district court may use its authority under Rule 23(d)(2) to order that class notice is given in actions maintained under Rule 23(b)(2)). *See also* Crawford v. Honig, 37 F.3d 485, 487 (9th Cir. 1994) (same). This discretionary authority is used rather infrequently, however.

<sup>58</sup> *See* Sperlberg v. Hoffmann-La Roche, Inc., 24 F.3d 463, 470 (3d Cir. 1994) (members of Rule 23(b)(3) class action are automatically included in the class, unless they timely exercise their right to opt out).

<sup>59</sup> *See* FED. R. CIV. P. § 23(c)(2)(A)-(B). The notice should also advise class members that they are entitled to enter court appearance through counsel. *Id.*, 23(c)(2)(C). Although not formally included in 23(c)(2), it is required that class notice describes, in general terms, the nature of the lawsuit. *See* Eisen v. Carlisle and Jacquelin, 417 U.S. 156 (1974).

<sup>60</sup> *See* FED. R. CIV. P. § 23(c)(2). To ensure effective notice, courts often require that notice is sent by mail to all class members whose identities and addresses are known (or can be ascertained) in addition to publishing class notice in the media.

<sup>61</sup> In general, the financial cost of notification is borne by plaintiffs’ attorneys. *See* Oppenheimer Fund, Inc. v. Sanders, 437 U.S. 340 (1978). Yet, the cost of notice is not always imposed, whole or in part, on plaintiffs’ attorneys. Rather, courts maintain the discretion to allocate the cost of notice between the opposing parties.

<sup>62</sup> Irrespective of the specific Rule 23(b) provision under which the action is certified, class members are entitled to receive notice of the proposed settlement or dismissal of the case. *See* FED. R. CIV. P. § 23(e). *See also* Payne v. Travenol Laboratories, 673 F.2d 798, 812 (5th Cir. 1982), *cert. denied*, 459 U.S. 1038 (1982) (court must order that notice is given to absent class members when settlement or dismissal of a class action lawsuit is sought). Yet, class notice given under Rule 23(e) is likely to be less costly, because notice requirements under Rule 23(e) are less rigorous than

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procedures.<sup>63</sup> Finally, costs may also include monetary sanctions, imposed by courts for failure to comply with procedural rules.<sup>64</sup>

### **2. *Future Rewards: The Returns on Investment in Class Action Law Enforcement***

Consistent with the basic tenets of the theory of investment, plaintiffs' attorneys' investment of resources in class action law enforcement is triggered by the prospects of obtaining future rewards.<sup>65</sup>

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those applied by Rule 23(c)(2) to class actions certified under Rule 23(b)(3). *See* *Gottlieb v. Wiles*, 11 F.3d 1004, 1013 (10th Cir. 1993).

When a class action lawsuit is certified for the sole purpose of settlement (known as "settlement class actions), a single, unified notice, given to class members at the time a proposed settlement is reached, can inform them of the certification of the action and their right to opt-out as well of the details of the proposed settlement thereby reducing the cost of notice incurred by plaintiffs' attorneys. *See generally* *In re General Motors Corp. Pick-Up Truck Fuel Tank Products Liability Litigation*, 55 F.3d 768 (3d Cir.), *cert. denied*, 516 U.S. 824 (1995) (stating the legal standards for certifying a settlement-only class action). *See also* *Ortiz v. Fibreboard Corp.*, 527 U.S. 815 (1999).

<sup>63</sup> Plaintiffs' attorneys also bear the often high cost of notice published in "widely circulated, national business-oriented publication or wire service," which is required under the Private Securities Litigation Reform Act of 1995 to inform members of the purported class of the filing of a securities class action lawsuit and advising them of timely-limited possibility to seek appointment as lead plaintiff. *See* Private Securities Litigation Reform Act of 1995, 15 U.S.C. §§ 77u-4(a)(3)(A)(i), 77u-4(a)(3)(A)(i)(I)-(II).

<sup>64</sup> Rule 11(c) of the Federal Rules of Civil Procedure authorizes courts to exercise discretion and impose a variety of sanctions on lawyers, law firms for violating the requirements specified by Rule 11(b) (for example, making frivolous claims). Sanctions imposed are monetary and non-monetary in nature, including monetary penalty paid to court, and payment of opponent's attorneys' fees and other related expenses. *See, e.g.,* *Baffa v. Donaldson, Lufkin & Jenrette Securities Corp.*, 222 F.3d 52, 57 (2d Cir. 2000) (discussing sanction requiring the payment of attorneys' fees).

In the context of securities class actions, however, imposition of Rule 11 sanctions for frivolous litigation is mandatory. *See* Private Securities Litigation Reform Act of 1995, 15 U.S.C. § 77u-4(a).

<sup>65</sup> Yet, investment in class action law enforcement may be triggered by additional factors other than the prospects of attorneys' fees. I take specific account of these factors later in this Section.

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Attorneys' fees are an important component of investment in class action law enforcement precisely because they represent the prospects of future returns on investment such that, along with other factors, they determine the magnitude of plaintiffs' attorneys' incentives to invest—and, hence, the level of investment—in class action law enforcement.<sup>66</sup> For this reason, the methods used to determine attorneys' fees and the magnitude of fee awards are an extremely significant aspect of investment in class action law enforcement.<sup>67</sup>

Briefly presenting the methods used to determine attorneys' fees in class actions and possible variance in fee awards, the discussion that follows below substantiates the general proposition that class action law enforcement is, in essence, an investment opportunity. Further, the insights gained throughout this discussion are germane to understanding key aspects of uncertainty over investment in class action law enforcement, an issue which I turn to discuss later in this Section.<sup>68</sup>

As a general rule, attorneys' fees are contingent on the outcomes of the case<sup>69</sup>—or, put differently, on the outcomes of the investment they

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<sup>66</sup> Put another way, deterrence and compensation outcomes obtained in class action law enforcement are merely by-product of plaintiff attorney's decision to invest her resources in an investment opportunity, where she prosecutes legal claims allegedly arising out of systematic corporate wrongdoing.

<sup>67</sup> Indeed, having recognized the effects of attorneys' fees on plaintiffs' attorneys' law enforcement incentives, the regulation of attorneys' fees occupied much academic research and inspired judicial attempts to induce plaintiffs' attorneys to perform in a way that best serves the interests of the plaintiffs' class. *See, e.g.,* Note, *Developments in the Law: The Path of Civil Litigation*, 113 HARV. L. REV. 1752, 1827, 1829-1837 (2000) (discussing plaintiffs' attorneys fees and their effect on incentives to invest in litigation).

<sup>68</sup> See Section III(A)(3) below.

<sup>69</sup> Plaintiffs' attorneys provide their services and investment on a contingency basis, such that they are not entitled to collect fees from representative or absent members of the plaintiffs' class they represent should they fail to obtain favorable outcome through either settlement or judgment. Further, unless specifically authorized by statute, courts cannot impose the payment of plaintiffs' attorneys' fees on class action defendants. *But cf.* Civil Rights Attorney's Fee Awards Act of 1976, Pub. L. No. 94-599, 90 Stat. 2641 (1976) (codified as amended at 42 U.S.C. § 1988(b)) (governing attorney's fees in civil rights litigation). When a favorable outcome is obtained, however, plaintiffs' attorneys right to fees arise from the common fund doctrine, according to which an attorney, whose efforts conferred benefit upon a

## *The Option Theory of Class Actions*

make—such that plaintiffs’ attorneys would be entitled to a fee award only if the litigation results in a favorable outcome to the plaintiffs’ class.<sup>70</sup> This would be the case in either one of two situations, namely, (i) where a judgment in favor of the class is entered, or (ii) where a settlement is negotiated<sup>71</sup> and approved by the court.<sup>72</sup> Indeed, class settlements, rather than extensive trials and judgments, are more frequently observed in the landscape of class action law enforcement across different contexts of social activity.

Having obtained a favorable outcome to the class, the precise magnitude of the attorneys’ fee award may vary considerably across cases, in both *absolute* (*i.e.*, the sheer magnitude of the fee award) and *relative* terms (*i.e.*, the rate of return-on-investment). Generally, courts use two methods to compute and determine attorney’s fee awards in class action cases where a common fund was created.<sup>73</sup> These methods include

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class of people – in the form of common fund – is entitled to recover costs and attorneys’ fees from the fund thus created. *See Savoie v. Merchants Bank*, 166 F.3d 456, 460 (2d Cir. 1999). Attorneys’ right to fee award is well established, despite the lack of contractual relations with absent class members.

<sup>70</sup> Judgments and, in particular, class settlements may include both pecuniary and non-pecuniary remedies to address the plaintiffs’ claims. Non-pecuniary remedies negotiated in class settlements often entail distribution of redeemable coupons, distribution of securities, and creation of monitoring plans to detect and compensate future harm. *See* Geoffrey P. Miller and Lori S. Singer, *Nonpecuniary Class Action Settlements*, 60(4) L. & CONTEMP. PROBS. 97 (1997) (discussing various types of non-pecuniary remedies in class action settlements).

<sup>71</sup> Obtaining a favorable outcome to the class, however, does not necessarily mean that the defendant’s liability has been established. To the contrary, it is a rather common practice that when settling claims brought against them, class action defendants do not make any admission with respect to the alleged liability.

<sup>72</sup> Unless a judicial approval is granted, a proposed class action settlement does not entail any binding or preclusive effects on absent class members, other than the named plaintiff itself. *See* FED. R. CIV. P. § 23(e) (requiring that notice is given to class members of a proposed class action settlement and that judicial approval is obtained). *See also* *In re Vitamins Antitrust Class Actions*, 215 F.3d 26 (D.C. Cir. 2000) (noting that settlement dynamics can cause even well-intentioned representative parties to give insufficient weight to the interests of the class as a whole, therefore justifying the supervisory role of the court under Rule 23(e)).

<sup>73</sup> These computational methods are also applied where the remedies are non-pecuniary.



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(i) the percentage-of-recovery and (ii) the “lodestar” method. Under the former method, the rewards for investment in class action law enforcement are derived from the aggregate value that was extracted from the prosecuted claims, through favorable settlement or judgment, of which the plaintiffs’ attorney internalizes an often-lucrative percentage.<sup>74</sup>

Under the latter method, however, courts multiply the number of hours actually worked by the plaintiffs’ attorney in the course of the litigation in an appropriate, court-approved hourly rate.<sup>75</sup> Yet, taking into account several factors—including, *inter alia*, (i) the difficulty and complexity of the factual and legal issues in the case; (ii) the complexity and duration of the litigation; (iii) the quality of the legal services provided by the plaintiffs’ attorney; (iv) the efforts devoted by plaintiffs’ attorneys; and (v) the risk of no recovery—courts may apply a two-way “risk multiplier” (that is, greater or smaller than 1) to adjust the computed sum up or down.<sup>76</sup> Similar considerations, however, are often given weight by courts in determining an appropriate fee percentage under the percentage-of-recovery method.<sup>77</sup>

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<sup>74</sup> Indeed, until recently courts often referred to 25% to 30% of the common fund as a benchmark for awarding attorneys’ fees. *See In re Activision Securities Litigation* 723 F. Supp. 1373 (N.D. Cal. 1989) (fee awards almost always hovers around 30% of the fund created), *but see Hanlon v. Chrysler Corp.*, 150 F.3d 1011, 1029 (9th Cir. 1998) (stating that 25% is the “benchmark award” but awarding 4.5% as attorneys’ fees out of a fund valued at \$115 million). In the wake of fee auctions and the impetus to use sliding fee percentages, fee percentages have decreased substantially. *But see Theodore Eisenberg & Geoffrey P. Miller, Attorney Fees in Class Action Settlements: An Empirical Study*, 1 J. EMPIRICAL LEGAL STUD. 27 (2004) (stating that the mean fee award in common fund cases is well below the widely quoted one-third figure, constituting 21.9 percent of the recovery across all cases for a comprehensive data set of published cases covering 1993-2002).

<sup>75</sup> *See, e.g., Goldberger v. Integrated Resources, Inc.*, 209 F.3d 43, 47 (2d Cir. 2000) (approving the lodestar method, but stating that it does not exclude the availability of percentage-of-recovery method to determine fees in common fund cases).

<sup>76</sup> *See Gunter v. Ridgewood Corp.*, 223 F. 3d 190, 195 n. 1 (3d Cir. 2000) (stating a variety of factors taken into account when applying a risk multiplier). *See also Goldberger v. Integrated Resources, Inc.*, 209 F.3d 43, 53 (2d Cir. 2000) (contingency risk and quality of representation must be considered in setting the reasonable fee).

<sup>77</sup> *See Deborah R. Hensler et al., Class Action Dilemmas: Pursuing Public Goals for Private Gain* 77-9 (2000) (discussing factors taken into account by the court when determining an appropriate fee percentage).

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In order to apply these computational methods, it is necessary to determine an appropriate hourly rate (under the “lodestar” method) or the fee percentage (under the percentage-of-recovery method), to which the plaintiffs’ attorney would be entitled. This determination is generally made *ex post*, after the claims have been prosecuted, recovery has been obtained, and a fee award is to be distributed.<sup>78</sup> Few courts, however, have used an auctioning mechanism to determine these figures *ex ante*, before class counsel was appointed by the court, the class claims actually prosecuted, and before a considerable part of the investment has been made.<sup>79</sup> Whether this determination is made *ex ante* or *ex post* is a fact that may bear significant impact on the level of uncertainty over investment in class action law enforcement.<sup>80</sup>

The observation that investment in class action law enforcement is triggered by the prospects of future rewards need not be further explained. Yet, ancillary rewards, in addition to the attorneys’ fee award,

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<sup>78</sup> Fee percentages are often negotiated between the defendant and plaintiffs’ attorney and are included in settlement proposals submitted to the court. In reviewing the proposed settlement, the court may also monitor fee awards, negotiated under severe conflict of interests, and decrease them accordingly. Indeed, that attorneys’ fees are negotiated contemporaneously with the settlement of class claims creates an imminent opportunity for collusion between the plaintiffs’ attorney and the defendant.

<sup>79</sup> See generally Third Circuit Task Force on the Selection of Class Counsel (2001) (discussing the use of auctions to appoint class counsel and determine attorney’s fees). See also Note, *Developments in the Law: The Path of Civil Litigation*, 113 HARV. L. REV. 1752, 1827, 1837-45 (2000) and Jill E. Fisch, *Lawyers on the Auction Block: Evaluating the Selection of Class Counsel by Auction*, 102 COLUM. L. REV. 650 (2001)

The *ex ante* determination of hourly rates or fee percentages is a by-product of using the auction mechanism. Its primary objective, however, is to align the diverging incentives of the court-appointed class counsel and the members of the purported class and thus minimize the conflict of interest (agency problem). The most recent contributions to the literature on fee auctions include Alon Harel & Alex Stein, *Auctioning for Loyalty: Selection and Monitoring of Class Counsel*, 22 YALE L. & POL’Y REV. 69 (2004) (proposing rules that govern fee auctions and address the class action agency problem) and Lucian A. Bebchuk, *The Questionable Case for Using Auctions to Select Lead Counsel*, 80 WASH. U. L.Q. 889 (2002) (discussing pitfalls of the auction mechanism).

<sup>80</sup> I discuss multi-dimensional uncertainty over investment in class action law enforcement in Section III(A)(3) below.

may also induce plaintiffs' attorneys' to invest resources in class action law enforcement. Investment in class action law enforcement may also produce a variety of short- and long-term benefits, which are likely to be taken into account by plaintiffs' attorneys when making investment decisions. Those are likely to include, for example, benefits derived from reduction in future costs of investment in class action law enforcement, as the firm moves down its learning curve and gains more experience and expertise.<sup>81</sup> Likewise, the prospects of benefits from gaining strategic position in the plaintiffs' bar vis-à-vis rival plaintiffs' law firms or otherwise establishing social and professional reputation in handling specific type of class action law enforcement may equally induce plaintiffs' attorneys' investment in class actions.<sup>82</sup>

Unlike benefits obtained from attorneys' fees awards, ancillary benefits from investment in class action law enforcement are highly idiosyncratic or otherwise firm-specific. While I recognize their existence for the sake of theoretical precision and identify their potential effect on plaintiffs' attorneys' investment decisions, I do not intend to take further account of such benefits throughout the analysis.

### ***3. Multi-dimensional Investment Uncertainty: Cost- and Price-Uncertainty in Class Action Law Enforcement***

Investment in class action law enforcement is made under conditions of uncertainty, though the level of uncertainty may vary

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<sup>81</sup> Where a law firm faces a learning curve, current investment in class action law enforcement entails two distinct benefits: *first*, the firm may be successful in obtaining a favorable outcome through settlement or judgment and therefore be entitled to attorney's fees; *second*, it moves the firm down the learning curve, thereby reducing future cost of investment in class action law enforcement such that it would be able to increase its future level of investment in law enforcement. Cf. Dixit & Pindyck, *Investment Under Uncertainty*, *supra* note 23, at 339-45.

<sup>82</sup> See Peter H. Schuck, *Mass Torts: An Institutional Evolutionist Perspective*, 80 CORNELL L. REV. 941, 952 (1995) (observing that professional prestige and ideology play an important role in fueling mass tort litigation). See also Paul M. Barrett, *Civil Action: Why Americans Look to the Courts to Cure the Nation's Social Ills*, WALL ST. J., Jan. 4, 2000, at A1 (plaintiffs' attorneys often argue that their role is to supplement governmental efforts to achieve vital social goals).

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significantly across different cases.<sup>83</sup> The existence of uncertainty generally means that, at best, plaintiffs' attorneys' can assign probabilities to alternative, future outcomes over which they are at any given time *ex ante* uncertain. Uncertainty, in theory, may pertain to multiple dimensions of investment in class action law enforcement. Hence, in addition to the magnitude of investment expenditures and the magnitude of future returns on investment, investment decision-making is extremely sensitive to the level of uncertainty. Identifying the sources of investment uncertainty is therefore conducive to understanding plaintiffs' attorneys' incentives to invest and investment decisions they ultimately make in the course of class action law enforcement.

Class action law enforcement is often an extremely resource-intensive process. Investment expenditures are continuously made throughout this process, depending on the conditions and circumstances that are present at different stages. For this reason, the magnitude of investment expenditures, which may be necessary to sustain class action law enforcement until future rewards are realized through settlement or judgment, is rather uncertain. The level of uncertainty, however, is likely to decrease over time, as plaintiffs' attorneys move forward in the law enforcement process and more information thus becomes available.

Analytically, uncertainty over the magnitude of investment expenditures arises from two distinct sources. *First*, plaintiffs' attorneys may be uncertain over the sheer magnitude of expenditures they will have to incur in the course of law enforcement. This may be the case because there is no way they can know in advance what procedural difficulties and substantive hurdles are likely to lie ahead of them; nor can they predict the magnitude of costs that the court may impose on them, over which they virtually have no control.<sup>84</sup> *Secondly*, plaintiffs' attorneys' are also uncertain on whether they will be entitled to reimbursement for the costs they incur and, where reimbursement is made—whether recoverable

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<sup>83</sup> By all means, uncertainty is intrinsic to the definition of investment as an act of incurring immediate cost in expectation of future rewards, discussed in Section II(A) above. That rewards are only realized at some point in the future renders any investment uncertain, at least to some degree. While the level and dimension of uncertainty may vary across investments, it is rather certain that investment uncertainty is all but inextricable.

<sup>84</sup> These costs may include the cost of class notice, the cost of judicially-imposed sanctions, and the like. An elaborate discussion is found in Section III(A)(1) above.

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costs will be equal to or less than their expended costs. These determinations are made by the court in the end of the case, when attorneys' fees are determined.

A second critical dimension of uncertainty over investment in class action law enforcement is the uncertainty over the magnitude of future rewards on investment. Recall that, in general, plaintiffs' attorneys are entitled to contingent attorneys' fees—that is, provided that a favorable outcome to the class is obtained through settlement or judgment—and that courts determine the attorneys' fee award using either of two different computational methods. Some uncertainty pertains to both these contingencies—namely, (i) the outcomes of the case and (ii) the magnitude of the attorneys' fee award—such that, *ex ante*, the ultimate magnitude of attorneys' fees remains uncertain.

Uncertainty over the outcomes of class action law enforcement—namely, whether the plaintiffs' class will prevail in trial or whether any positive value will be otherwise extracted through settlement negotiations (subject to the approval of the court)—is to a certain extent endogenous to the plaintiffs' attorney's level of investment. That is, it is likely that higher investment on the part of the plaintiffs' attorney to assess the merits of the case will produce valuable information; such information will reduce the level of uncertainty, for it may be informative in suggesting which of these outcome is more or less likely to occur. Further, it is also possible that positive information externalities will be generated through competition by rival plaintiffs' attorneys, vying to prosecute similar claims on behalf of putative plaintiffs' classes.<sup>85</sup> The level of uncertainty is also likely to decrease as the parties move forward in the law enforcement process and more information becomes available through discovery and trial.

There is also some level of uncertainty over the rate of attorneys' fees to which plaintiffs' attorneys would be entitled on the event that a favorable outcome is obtained. Unlike uncertainty over the outcomes of the case, uncertainty over the rate of attorneys' fees is exogenous to the

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<sup>85</sup> Because plaintiffs' attorneys obtain no proprietary interest in the information they produce, plaintiffs' attorneys may decide—as the discussion of sequential investment decisions demonstrates—to delay their investment and free-ride on information externalities that are produced by their competitors or by public law enforcement agencies. *But see* *In re Enron Corporation Securities Litigation Consolidated Complaint*, Civil Action No. H-01-3624 (S.D. Tex. 2002), where plaintiffs' attorneys sought to obtain copyright protection to their work-product.

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plaintiffs' attorney's investment, for additional investment is unlikely to reduce the level of uncertainty in that respect.<sup>86</sup> More specifically, uncertainty pertains to various dimensions of attorneys' fee awards, which are determined *ex post*, at the conclusion of the litigation. Those dimensions may include (i) the method the court is likely to use to compute the attorneys' fee award; (ii) the hourly rate or the fee percentage that the court will apply to determine the magnitude of the fee award, given the computational method that the court chooses;<sup>87</sup> (iii) the possibility that a two-way risk-multiplier will be applied to adjust the computed sum up or down;<sup>88</sup> (iv) the magnitude of such risk multiplier; and, finally (v) the possibility that the court will err (in either direction) in assessing the relevant factors for applying such multiplier.

Against this backdrop, judicial experimentation with lead counsel auctions—where competing plaintiffs' attorneys submit proposed fee structures<sup>89</sup> in an attempt to have the winning bid and obtain the lead

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<sup>86</sup> It is not entirely unlikely that legal research may reveal patterns, characterizing the award of attorneys' fees by certain judges or in specific judicial districts and circuits or states. *See, e.g.,* In re Activision Securities Litigation 723 F. Supp. 1373 (N.D. Cal. 1989) (fee awards almost always hovers around 30% of the fund created), *but see* Hanlon v. Chrysler Corp., 150 F.3d 1011, 1029 (9th Cir. 1998) (stating that 25% is the "benchmark award" but awarding 4.5% as attorneys' fees out of a fund valued at \$115 million). *See also* Geoffrey P. Miller & Lori S. Singer, *Nonpecuniary Class Action Settlements*, 60(4) L. & CONTEMP. PROBS. 97, 142-153 (1997) (examining the methods used to award attorneys' fees in common fund cases across federal circuits and in each of the fifty states and finding a high level of variance). While information on rules governing the award of attorneys' fees may reduce the level of uncertainty pertaining to the choice of computational methods or the availability of fee percentage or hourly rate benchmark, it cannot reduce uncertainty in its entirety.

<sup>87</sup> Even where the parties include a stipulation of an agreed-upon fee award in a proposed settlement they submit to the court's approval, the court retains authority under Rule 23(e) to monitor the fairness and the adequacy of the terms of the settlement along with the reasonableness of the fee award. *See* FED. R. CIV. P. § 23(e).

<sup>88</sup> In fact, courts often apply risk-multipliers to adjust the computed award under both computational methods.

<sup>89</sup> Judicial experimentation with lead counsel auctions gave rise to a variety of auction designs. Hence, fee proposals submitted by plaintiff attorneys are tailored according to a set of rules, specified by the court in its order on lead counsel auction. Plaintiffs' attorneys may compete on various dimensions, including, for example,

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counsel appointment<sup>90</sup>—shifts fee determination to the *ex ante* stage, before claims are prosecuted and investment in litigation is made.<sup>91</sup> Lead counsel auctions reduce therefore the level of uncertainty over attorneys' fee awards. Yet, *ex ante* determination of fees does not eliminate uncertainty altogether; residual level of uncertainty stems from the court's authority to make *ex post* fee adjustments, up or down, to the fee structure that was determined *ex ante*.

On the whole, investment in class action law enforcement is made under multi-dimensional conditions of uncertainty. While the level of uncertainty or its sources may vary from one case to another, the level of uncertainty is all but a key factor in investment decision-making and is thus expected to bear significant impact on the magnitude of plaintiffs'

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hourly rates, fee percentages, sliding fee structures, magnitude of expected recovery, and the like. See, e.g., *In re Oracle Securities Litigation*, 131 F.R.D. 688 (N.D. Cal. 1990); 132 F.R.D. 538 (N.D. Cal. 1990); 136 F.R.D. 639 (N.D. Cal. 1991). Judge Vaughn Walker of the District Court for the Northern District of California who was the first to conduct lead counsel auction, has conducted auctions in several subsequent cases. See *In re Wells Fargo Securities Litig.*, 157 F.R.D. 467 (N.D. Cal. 1994); *In re California Micro Devices*, 168 F.R.D. 257 (N.D. Cal. 1994); *Wenderhold v. Cylink*, 188 F.R.D. 577 (N.D. Cal. 1999).

In a recent case, however, a fee auction was conducted to select lead counsel in a class action lawsuit involving antitrust allegations. The court designed an auction in which plaintiffs attorneys would receive no fee if the recovery obtained fell below \$X but would be entitled to 25% fee for any amount in excess of \$X. Plaintiffs' attorneys thus competed on the value of X alone. See *In re Auctions Houses Antitrust Litigation*, 197 F.R.D. 71, 83-4 (2000). Clearly, this auction design eliminates uncertainty over the *rate* of attorneys' fees, though the *magnitude* of the attorneys' fee award remains uncertain as this depends on the amount recovered in the case.

<sup>90</sup> The reduction in the level of uncertainty over attorneys' fees is a mere by-product of lead counsel auctions. Courts have primarily used auctions as a means of selecting lead class counsel.

<sup>91</sup> Investment in class action law enforcement, however, does not start with the formal commencement of litigation. Rather, substantial expenditures may be incurred at earlier stages, preceding the filing of lawsuits. Hence, the uncertainty-reducing effect of *ex ante* fee determination through lead counsel auctions does not capture the pre-filing stages of investment in class action law enforcement.

attorneys' incentives to invest and investment decisions they ultimately make in the course of class action law enforcement.<sup>92</sup>

**4. *Irreversible Investment Expenditures:  
Sunk Costs in Class Action Law Enforcement***

A highly significant characteristic of investment in class action law enforcement is that investment expenditures are largely or completely irreversible. By that I generally mean that once expended, investment expenditures turn into a sunk cost. Thus, should relevant conditions change and render investment in class action law enforcement unprofitable, plaintiffs' attorneys cannot disinvest or otherwise recoup their expenditures.<sup>93</sup>

Investment expenditures in class action law enforcement are irreversible because, for the most part, plaintiffs' attorneys' investment is highly case-specific. Putting aside investment in infrastructure—namely, purchasing a database technology and legal literature, incurring cost of professional training, and what have you—and investment in gaining relevant expertise, considerable expenditures that plaintiffs' attorneys' often incur in the course of class action law enforcement are generally channeled to discrete lines of investigation, to producing information on specific wrongs and harms, and to developing particular legal theories.<sup>94</sup> The outcomes of such investigation and the information produced are

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<sup>92</sup> Investment decision-making in class action law enforcement is analyzed in depth in Halftack, *The Class Action Enterprise*, *supra* note 1, Parts VIII and IX.

<sup>93</sup> Yet, in some cases investment in class action law enforcement is not entirely sunk. For instance, plaintiffs' attorneys are often able to pursue litigation on behalf of individual victims they have identified in the course of their investigation, if maintaining class action law enforcement becomes unfeasible or otherwise unprofitable. Thus, the individual suit channel provides a fallback option, albeit an imperfect one, through which plaintiffs' attorneys may be able to recover part of investment expenditures they incurred.

<sup>94</sup> Nonetheless, attorneys' investigation in one case may provide ancillary leads, implicating the defendant (or other defendants) with potential, unrelated wrongful conduct. Thus, on the event that the first case turns unprofitable, spillover effects of investigation may provide new law enforcement opportunities, where with some probability plaintiffs' attorneys may recoup part of the otherwise-sunk investment expenditures.



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valuable only *in conjunction* with the prosecution of specific claims. Further, as plaintiffs' attorneys move forward in the course of prosecuting a class action lawsuit, their expenditures become increasingly more case-specific and thus more irreversible.

Precisely for this reason, and due in part to multi-dimensional uncertainty over investment in class action law enforcement,<sup>95</sup> investment of resources entails high financial risk of non-recovery.<sup>96</sup> The irreversibility of investment in class action law enforcement interacts with other features of investment in class action law enforcement—namely, (i) the magnitude of investment expenditures, (ii) the magnitude of future rewards on investment, and (iii) the multi-dimensional uncertainty over investment variables—to determine the magnitude of plaintiffs' attorneys' incentives to invest and investment decisions they ultimately make<sup>97</sup> and, as a corollary, to affect the level of class action law enforcement and the magnitude of liability and deterrence outcomes.<sup>98</sup>

Two immediate descriptive implications arise from the irreversibility of investment expenditures in class action law enforcement: *First*, plaintiffs' attorneys' investment decisions are highly sensitive to the level of uncertainty over investment in class action law enforcement. Hence, the more the investment expenditure is irreversible, and assuming all else remains equal, the less inclined will a plaintiffs' attorney be to invest in class action law enforcement in the face of investment

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<sup>95</sup> Multi-dimensional uncertainty over investment in class action law enforcement is discussed in greater detail in Section III(A)(3) above.

<sup>96</sup> In theory, plaintiffs' law firms can mitigate the effects of high financial risk resulting from investment uncertainty and irreversibility of investment expenditures. To do so, they need satisfy two conditions, namely, (i) diversify their litigation portfolio by investing in additional class action cases and (ii) create an opportunity for exploiting cross-case positive externalities and economies of scale, by investing in class action cases that share some major common features. Indeed, that highly-specialized practice areas are observed in many plaintiffs' law firms reinforces this proposition.

<sup>97</sup> Investment decisions are discussed in Halfteck, *The Class Action Enterprise*, *supra* note 1, Parts VIII and IX.

<sup>98</sup> The effects of the level of investment on liability and deterrence outcomes of class action law enforcement are analyzed in Section X below.

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uncertainty.<sup>99</sup> *Second*, as the level of uncertainty decreases over time, controlling the timing of investment expenditures (that is, using the option to postpone investment decisions) is by all means a critical factor, of which plaintiffs' attorneys are expected to take advantage while investing resources in class action law enforcement.

### ***B. The Multi-stage, Sequential Property of Investment in Class Action Law Enforcement***

Thus far, I have developed the general proposition that class action law enforcement comprises, in essence, an investment opportunity under multi-dimensional conditions of uncertainty. Yet, a closer analysis also reveals the *sequential property* of this investment opportunity. The sequential nature of the class action investment opportunity stems from the general observation that class action law enforcement is, in fact, a *multi-stage* investment project, comprising a particular sequence of discrete investments, all of which must be completed in sequence before returns on investment may, with some probability, be realized.<sup>100</sup>

More specifically, class action law enforcement consists of a series of interrelated, discrete investment opportunities that require plaintiffs' attorneys to make sequential investment decisions. In this sequence, an initial investment opportunity and the corresponding investment made are followed sequentially, with some probability, by the next investment opportunity in the sequence, at which point the plaintiffs' attorney must make another investment decision.<sup>101</sup> This sequential investment pattern

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<sup>99</sup> For this reason, incentives to invest may vary across plaintiffs' law firms, depending *inter alia* on firm-specific relative degree of irreversibility of investment expenditures.

<sup>100</sup> This definition is based on the theory of sequential investment developed by Dixit & Pindyck, *Investment Under Uncertainty*, *supra* note 23, at 21-22, 319 *et seq.*

<sup>101</sup> That plaintiff attorney may decide to stop investing, temporarily or permanently, after each stage in the sequence suggests once again that the process of class action law enforcement comprises a sequential, multi-stage investment opportunity.

## *The Option Theory of Class Actions*

is bound to repeat itself all the way through the completion of the investment sequence.<sup>102</sup>

To exemplify the sequential property of investment in class action law enforcement consider the class action lawsuits that were filed against the Ford and Firestone corporations in the wake of rollover accidents involving “Explorer” sport-utility vehicles. Suppose, for example, that the plaintiffs’ attorney’s initial investment in investigating rollover accident risks, common to “Explorer” sport-utility vehicles, may, with some probability, produce information that implicates the Ford and/or Firestone with causally-related wrongful conduct. The payoff for the initial, first-stage investment lies therefore in the valuable information that the plaintiffs’ attorney has obtained, which then generates the next investment opportunity in the sequence. Thus, having discovered this information, the plaintiffs’ attorney obtains a second-stage investment opportunity, namely, the opportunity to invest in contemplating, preparing, and filing a class action lawsuit against Ford and Firestone. Again, the plaintiffs’ attorney will have to decide whether to invest, and if so—what share of her resources to commit to that investment.

By contrast, an investment that fails to generate payoffs—upon which the following investment opportunity in the sequence would have lied—will, at any stage, put an end to the potential investment sequence altogether. For example, should the plaintiffs’ attorney’s initial investment in investigation be unsuccessful, such that no implicating information is discovered, subsequent investment in contemplating and filing class action lawsuit will not be possible.

On a more general level, however, the sequence of law enforcement investment opportunities—and the corresponding sequential investment decisions—commences with the initial investment of resources by the plaintiffs’ attorney, undertaken to further the pursuit of class action law enforcement. This sequence generally consists of a number of sequential stages, where a plaintiffs’ attorney decides whether to invest in the given

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<sup>102</sup> This is not to say, however, that the sequence of investment opportunities is not time-bound. Rather to the contrary, the time span of class action law enforcement—and, accordingly, the sequence of investment opportunities—is unambiguously defined. The sequence commences with the initial investment opportunity to investigate a potential systematic wrongdoing, and culminates (at the extreme end) with the resolution of the case through settlement or trial, where the plaintiff attorney obtains returns on her investment.

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investment opportunity, and what share of her resources to commit. More specifically, the class action investment sequence may generally include (i) an opportunity to invest in investigating alleged wrongdoing; (ii) an opportunity to invest in contemplating, preparing and filing a class action lawsuit; (iii) an opportunity to invest in filing and defending pre-trial motions, including a motion to dismiss and a motion for summary judgment; (iv) an opportunity to invest in undertaking discovery and in producing evidence, through expert scientific studies and otherwise; (v) an opportunity to invest in obtaining class certification and in securing the appointment as lead class counsel; and, finally (vi) an opportunity to invest in trial or settlement negotiations to obtain a favorable outcome to the class.

With that said, it does not necessarily follow that the investment sequence always begins with the plaintiffs' attorney's investment in investigation of potential corporate wrongdoing. Rather, depending on case-specific characteristics—whether, for example, the alleged wrongdoing was investigated by public authorities, such that sufficient information to filing a lawsuit is publicly-available<sup>103</sup>—the investment sequence and the number of stages it comprises may vary across cases. Likewise, the investment sequence may also vary across rival plaintiffs' attorneys who pursue class action law enforcement of similar claims. Specifically, while the sequence of investment for some plaintiffs' attorneys may begin with investment in investigation and followed by investment in preparing and filing a class action lawsuit, other plaintiffs' attorneys may free-ride on the efforts of others and focus their investment

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<sup>103</sup> Indeed, the National Highway Traffic Safety Administration as well as state investigators that examined accident-prone "Explorer" sport-utility vehicles revealed that faulty "Explorer" tires, susceptible to a tread-separation problem, provided the common cause, systematically leading to fatal accidents. See John Greenwald, *Tired of Each Other*, TIME, June 4, 2001, at 50 (Firestone's tires may be a factor in "Explorer" rollover accidents); Michael Winerip, *What's Tab Turner Got Against Ford?*, N.Y. TIMES MAGAZINE, Dec. 17, 2000, at 46 (discussing fatal accidents in which Ford "Explorer" defective tires were alleged to cause the accident and the ensuing individual and class action lawsuits). Thus, the publicly available information relieved plaintiffs' attorneys, at least to some extent, from the burden of producing this information on their own, and thereby reduced the scope of investment they had to make while pursuing class action litigation against Ford and Firestone.

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on the latter stages of the sequence, where they may invest, for example, in obtaining appointment as lead class counsel.

Finally, the sequential property of investment in class action law enforcement yields several noteworthy implications.

*First*, the most significant implication is that any decision made by a plaintiffs' attorney in the course of class action law enforcement could be structured in unified terms of investment decision and analyzed as such. For instance, manifestations of the class action agency problem—namely, shirking or collusion on the part of the plaintiffs' attorney—can also be portrayed in investment terms. Along these lines, the decision whether to strike a collusive, “sweetheart” settlement entails, in essence, an investment decision, where the plaintiffs' attorney has to decide whether to incur cost (*i.e.*, the forgone profits from the collusive deal and the cost incurred in further negotiation or trial) in expectation of possible future rewards (*i.e.*, award of attorneys' fees from a non-collusive settlement or judgment). Thus, having identified the common investment features that underlie the myriad manifestations of plaintiffs' attorneys' performance in the course of class action law enforcement, the theory entails the capacity to generate comprehensive insights, descriptive and normative in nature, concerning plaintiffs' attorneys' incentives to invest and investment decisions they are ultimately expected to make.

*Second*, identifying the sequential property of investment in class action law enforcement bifurcates the intricate law enforcement enterprise into numerous sequential investment opportunities and investment decisions, whose relative effects on the liability and deterrence outcomes of class action law enforcement can be studied and analyzed independently of each other. For this reason, the general investment theory I presently advance seems to be of high analytic precision.

*Third*, the sequential property of investment in class action law enforcement also demonstrates the conceptual inclusiveness of the general theory. Specifically, the foregoing discussion has made it clear that the class action law enforcement enterprise is an all-encompassing process, including, for example, plaintiffs' attorneys' early investment in investigation of potential wrongdoing. Indeed, liability and deterrence outcomes obtained through class action law enforcement are contingent on the entire investment sequence, not merely on investment made in trial on in any stage that follows the commencement of a lawsuit. By contrast, existing class action analyses, predominately relying on the intrinsic

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agency problem, are significantly narrower in scope and are therefore incapable of capturing class action law enforcement in its entire complexity and accuracy.

*Finally*, the sequential nature of investment in class action law enforcement bears decisive impact on investment decisions plaintiffs' attorneys' ultimately make. Specifically, the time length of the investment sequence, the number of investment stages, and the ability to start (or stop) investing midstream, interact to determine the magnitude of private incentives to invest and investment decisions in the course of class action law enforcement.

### **IV. THE JUDICIAL ASSIGNMENT OF OPTIONS TO INVEST IN CLASS ACTION LAW ENFORCEMENT**

Investment activity in class action law enforcement is regulated by the state,<sup>104</sup> which delegates the regulatory authority to trial courts.<sup>105</sup>

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<sup>104</sup> The fact that plaintiffs' attorneys' investment decisions may entail severe negative externalities provides a compelling justification for regulating the right to invest in class action law enforcement. Specifically, the negative externality includes (i) the administrative costs imposed on the legal system and (ii) the dilution of deterrence effects that result from sub-optimal damages recovery.

<sup>105</sup> Indeed, a variety of entrepreneurial and business activities are intensively regulated by the state, and plaintiffs' attorneys' investment in class action law enforcement is of no exception. From an institutional perspective, regulatory oversight over investment in class action law enforcement is entrusted in the province of courts though how well are courts situated to perform this regulatory function is a question subject to deep skepticism. *See generally* William M. Landes, *An Economic Analysis of the Courts*, 14 J. LAW & ECON. 61 (1971). *See also* Robert D. Cooter & Daniel L. Rubinfeld, *Trial Courts: An Economic Perspective*, 24 L. & Soc. Rev. 533 (1990).

Having recognized their insufficient capacity to perform rigorous regulatory oversight over investment in class action law enforcement, courts have recently been willing to employ market mechanisms to regulate plaintiffs' attorneys' investment in class action law enforcement. *See Note, Class Auctions: Market Models for Attorneys' Fees in Class Action Litigation*, 1134 HARV. L. REV. 1827 (2000); Jill E. Fisch, *Lawyers on the Auction Block: Evaluating the Selection of Class Counsel by Auction*, COLUM. L. REV. (2001); *Third Circuit Task Force Report: Selection of Class Counsel* (2001). Indeed, the hotly-debated judicial experimentation with lead counsel auctions—used to select lead class counsel and determine their fees at the outset of the litigation—demonstrate a creative initiative to alter the institutional structure of regulatory

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Hence, plaintiffs' attorneys who are interested in investing resources in prosecution of claims on behalf of a pool of similarly-situated claimants must obtain, at a given point during the investment sequence, the *right (or license) to invest* in class action law enforcement which, once granted, entails the corresponding *right to collect future rewards* on investment, if any materialize.<sup>106</sup> The regulatory dimension of investment in class action law enforcement may carry significant effects on plaintiffs' attorneys' investment in law enforcement, such that failing to take account of which would render the present analysis incomplete.<sup>107</sup>

I analyze the regulatory dimension of investment in class action law enforcement. To that end, I develop the general proposition that *the right (or license) to invest in the class action sequential investment opportunity qualifies, in essence, as a legal entitlement that is assigned through a judicial-*

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oversight over investment in class action law enforcement. The "lead plaintiff" provision introduced by the Private Securities Litigation Reform Act of 1995 is yet another attempt, intended to alter the institutional structure of regulatory oversight of securities class action litigation. See Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, 109 Stat. 737 (codified as additions and amendments to 15 U.S.C. § 77u-4 *et seq.*, 15 U.S.C. § 77u-4 *et seq.*). The proposal underlying the "lead plaintiff" provision is presented in Elliott J. Weiss & John S. Beckerman, *Let the Money do the Monitoring: How Institutional Investors Can Reduce Agency Cost in Securities Class Actions*, 104 YALE L.J. 2053 (1995).

<sup>106</sup> In other words, the plaintiffs' attorney must first obtain an appropriate license, granted by state-authorized agents (judges). That plaintiffs' attorneys' investment decisions may entail significant negative externality on social welfare provides a compelling justification for regulating the right to invest in class action law enforcement. Specifically, this negative externality includes the administrative costs incurred through class action law enforcement in addition to dilution of deterrence effects that may result from sub-optimal investment and sub-optimal law enforcement outcomes.

<sup>107</sup> More accurately, the license to invest in class action law enforcement includes a complex bundle of rights and obligations, all arising from courts' continuous regulatory oversight of the performance and conduct of plaintiffs' attorneys. These regulatory aspects, however, are not addressed in the present context for they are conceptually treated as a source of investment costs rather than as pertaining to the assignment of investment opportunities, an issue that this Section closely analyzes.

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*regulatory process*.<sup>108</sup> I also identify the implications for the general theory of investment in class action law enforcement.

This proposition stems directly from the doctrinal requirements that plaintiffs' attorneys, vying to invest financial wherewithal and intellectual capital in the prosecution of claims on behalf of disperse, similarly-situated victims and reap future returns, must satisfy two procedural conditions; they must (i) have the lawsuit certified as a class action<sup>109</sup> and they must (ii) obtain an appointment as lead class counsel.<sup>110</sup> Only when both these conditions are duly satisfied, the plaintiffs' attorney is *legally entitled* to invest in the class action sequential investment opportunity, to the utter exclusion of rival, competing plaintiffs' attorneys.<sup>111</sup>

The present focus involves, therefore, the possible effects that the regulatory assignment of the investment entitlement may bear on the plaintiffs' attorney's incentives to invest and the investment decisions she ultimately makes in the course of class action law enforcement.

Specifically, that the right to invest is assigned through a regulatory process may bear significant impact on plaintiffs' attorney's incentives to invest and investment decisions they ultimately make. This is likely to be the case because the regulatory assignment process induces competitive

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<sup>108</sup> In the discussion that follows I use the "right to invest in class action law enforcement" and "the class action investment entitlement" interchangeably.

<sup>109</sup> This requirement is embedded in Rules 23(a), (b), (c)(1) and (c)(4) of the Federal Rules of Civil Procedure; its application was meticulously developed in class action doctrine.

<sup>110</sup> This requirement arises from Rule 23(a)(4) of the Federal Rules of Civil Procedure, which courts routinely employ to scrutinize the competence of a potential plaintiffs' attorney to "fairly and adequately protect the interests of the class." *See, e.g., Greisz v. Household Bank, N.A.*, 176 F. 3d 1012 (7th Cir. 1999) (Rule 23(a)(4) requires the court to assess the competence of counsel for the class); *In re Joint Eastern and Southern District Asbestos Litigation*, 78 F. 3d 764, 778 (2d Cir. 1996) (Rule 23(a)(4) requires that class counsel are qualified, experienced, and generally able to conduct the litigation).

<sup>111</sup> The entitlement in the class action investment opportunity is revocable, however. Courts' oversight duty is not relieved once class counsel is selected, at the outset of the litigation. To the contrary, courts have a constant duty to monitor the professional competency and performance of class counsel throughout the litigation. *See In re Fine Paper Antitrust Litigation*, 617 F. 2d 22, 27 (3d Cir. 1980).



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forces among rival plaintiffs' attorneys and increases the level of uncertainty over the preceding stages of investment in class action law enforcement, namely, those that take place prior to obtaining the right to invest. Yet, in order to analyze the effects that are likely to be born on plaintiffs' attorneys' incentives to invest and investment decisions in class action law enforcement it is first necessary to understand (i) exactly how the right to invest in class action law enforcement is assigned to plaintiffs' attorneys, and (ii) what are the economic effects of obtaining the right to invest in class action investment opportunity on the plaintiffs' attorney incentives to invest. The discussion below untangles both these issues.

### ***A. Obtaining the Class Action Entitlement: A Judicially-granted Monopoly over Investment in Class Action Law Enforcement***

Vying to invest her financial and intellectual resources and reap possible, future returns, the plaintiffs' attorney must obtain the right to invest in the class action investment opportunity, or else, her investment would be largely in vein.<sup>112</sup> Specifically, to obtain this entitlement the plaintiffs' attorney must (i) have the lawsuit certified as a class action<sup>113</sup> and (ii) obtain appointment to the position of lead class counsel.<sup>114</sup> Once granted, however, this entitlement entails a compound right, specifically

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<sup>112</sup> Of course, plaintiffs' attorney's investment in class action law enforcement may be beneficial, even if ultimately she fails to obtain the right to invest. This is likely to be the case especially when the investment made gives rise to ancillary benefits, entails possible spillover effects, or reduces the cost of future investment in law enforcement. For an elaborate account of possible ancillary benefits see the discussion in Section III(A)(2) above.

<sup>113</sup> This requirement is embedded in Rules 23(a), (b), (c)(1) and (c)(4) of the Federal Rules of Civil Procedure and meticulously developed in related class action case law.

<sup>114</sup> This requirement arises from Rule 23(a)(4) of the Federal Rules of Civil Procedure, which courts routinely employ to scrutinize the competence of a potential plaintiffs' attorney to "fairly and adequately protect the interests of the class." *See, e.g., Greisz v. Household Bank, N.A.*, 176 F. 3d 1012 (7th Cir. 1999) (Rule 23(a)(4) requires the court to assess the competence of counsel for the class); *In re Joint Eastern and Southern District Asbestos Litigation*, 78 F. 3d 764, 778 (2d Cir. 1996) (Rule 23(a)(4) requires that class counsel are qualified, experienced, and generally able to conduct the litigation).

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including (i) the sole right to invest resources in the prosecution of the class' claims along with (ii) the corresponding right to obtain future rewards which are realized, with some probability, by making the investment.<sup>115</sup> Put in legal parlance, this compound right comprises (i) the right to represent the plaintiffs' class all the way throughout until the conclusion of the case,<sup>116</sup> whether through trial or settlement,<sup>117</sup> and (ii) the ensuing right to obtain returns on investment in the form of often-lucrative attorney's fee award.<sup>118</sup>

From a procedural perspective, no entitlement exists, let alone can it be assigned, unless the court determines that the action brought on behalf of a pool of similarly-situated, individual victims satisfies the prerequisites for a class action<sup>119</sup> and can be maintained as such.<sup>120</sup> Upon this determination, the entitlement is assigned to the plaintiffs' attorney

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<sup>115</sup> Future rewards for investment in class action law enforcement, represented by attorneys' fees awards and possible ancillary benefits, are discussed in Section III(A)(2) above.

<sup>116</sup> Of course, the court retains the discretion to revoke the right to invest in the class action investment opportunity and replace the class counsel with another counsel should the court find and determine that the former has failed to adequately act in furthering the interests of the class.

<sup>117</sup> This transaction couples also a judicially-granted license to utilize the class action device for the purposes of prosecuting legal claims on behalf of a dispersion of similarly-situated victims. In other words, the certification of the action brought on behalf of the named plaintiff(s) as a class action, is a built-in component in this transaction.

<sup>118</sup> Similarly to other aspects of the class action sequential investment opportunity also the plaintiff attorney's entitlement to reap returns on her investment are explicitly regulated. Specifically, the judicial "common fund" doctrine establishes the attorney's right for compensation from a common fund created by her efforts for the benefit of others. *See Savoie v. Merchants Bank*, 166 F.3d 456, 460 (2d Cir. 1999) ("A party whose initiative confers a benefit upon a class of people is entitled to recover its costs—including attorneys' fees—from the common fund."). *See also Hanlon v. Chrysler Corp.*, 150 F.3d 1011 (9th Cir. 1998) (same).

<sup>119</sup> *See* FED. R. CIV. P. §§ 23(a)(1)-(4) (prerequisites to a class action).

<sup>120</sup> *See* FED. R. CIV. P. § 23(b) (class actions maintainable); § 23(c)(1).

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who the court finds professionally competent and financially well-situated to represent the class.<sup>121</sup>

From an economic perspective, however, the class action entitlement is assigned through a legally-regulated transaction, involving the would-be representative class counsel, on the one hand, and the presiding court, on the other. In this transaction, federal or state courts act as *ex lege* fiduciaries on behalf of disperse, similarly-situated victims (*i.e.*, putative class members), whose legal claims are at stake.<sup>122</sup> Specifically, courts are entrusted with the authority to transfer the right to invest in the class action investment opportunity along with the right to collect future rewards on the investment made in exchange for the plaintiffs' attorney's commitment to invest her resources on behalf of the class. Further, when transacting the right to invest in class action law enforcement courts, often give weight to earlier investment that was made by the plaintiffs' attorney prior to seeking assignment of the right to invest.<sup>123</sup> Hence, in exchange for acquiring (i) a right to invest in the class action investment opportunity and (ii) collect future rewards, if any, the plaintiffs' attorney commits to invest her intellectual capital (*i.e.*, legal services) and financial wherewithal to extract the value of the prosecuted claims.

The plaintiffs' attorney, on the other hand, obtains an *exclusive right* to invest in the class action investment opportunity. In fact, the exclusive property of this right suggests that the plaintiffs' attorney obtains a *judicially-granted monopoly* over investment in the prosecution of claims, to the utter exclusion of rival plaintiffs' attorneys. It is a monopoly over investment in law enforcement precisely because no rival plaintiffs' attorney can *formally* deprive the assigned class counsel of her right to invest and takeover the prosecution of these claims.<sup>124</sup> To that end, trial

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<sup>121</sup> Several trial courts have employed in the past years fee auctions at the outset of the case as a means of selecting lead class counsel.

<sup>122</sup> In two recent cases, the court relied on its *ex lege* fiduciary duty to reason its decision to utilize fee auctions to select class counsel and determine her fees. *See* *In re Commtouch Software Ltd. Securities Litigation* (N.D. Cal. 2001); *In re Quintus Securities Litigation* (N.D. Cal. 2001).

<sup>123</sup> Courts often examine the quality of the pleadings submitted. This, perhaps, may provide a proxy for future investment on the part of the plaintiffs' attorney.

<sup>124</sup> Rival plaintiffs' attorneys can nevertheless undermine the investment monopoly of the representative class counsel, simply because her entitlement is not

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courts may even issue an anti-suit injunction to prevent rival plaintiffs' attorneys from prosecuting identical actions which may threaten to undermine the assigned class counsel's monopoly over investment in the class action investment opportunity.<sup>125</sup>

### ***B. The Temporal Watershed: Ex Ante vs. Ex Post Investments***

Having analyzed the regulatory assignment of the right (*i.e.*, license) to invest in class action law enforcement, I turn to discuss its effects on the plaintiffs' attorney's incentives to invest and the investment decisions she ultimately makes in the course of class action law enforcement.

Recall, first, the multi-stage, sequential property of investment in class action law enforcement.<sup>126</sup> The sequence of investment often commences with the plaintiffs' attorney's initial investment in investigation of potential wrongful conduct, followed sequentially by additional investment in contemplating, preparing and filing legal action on behalf of a pool of similarly-situated, individual victims. Prior to obtaining the right to invest in the remaining stages of the sequence, the plaintiffs' attorney may also incur additional investment expenditures, which may be necessary to launch a class action lawsuit or obtain the right to invest.

Hence, the regulatory assignment of the right to invest in class action law enforcement clearly demarcates a temporal watershed, distinguishing between *ex ante* (*i.e.*, pre-assignment) investment opportunities and corresponding investment decisions, on the one

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universally protected. One way this could be done is by filing a competing class action lawsuit, concerning the same wrongful conduct, in a state jurisdiction. Having done so, the state court plaintiffs' attorney will be able to negotiate a global settlement, where he settles claims asserted in the state court class action lawsuit in addition to claims asserted in the federal class action lawsuit, notwithstanding that the latter are under original federal jurisdiction.

<sup>125</sup> See Henry P. Monaghan, *Antisuit Injunctions and Preclusion Against Absent Nonresident Class Members*, 98 COLUM. L. REV. 1148 (1998).

<sup>126</sup> For an elaborate account of the multi-stage, sequential nature of investment in class action law enforcement see Section III(B) above.

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hand,<sup>127</sup> and *ex post* (i.e., post-assignment) investment opportunities and investment decisions, on the other.<sup>128</sup> Identifying this temporal watershed is significant to analyzing liability and deterrence outcomes of class action law enforcement because it is theoretically possible that the magnitude of plaintiffs' attorneys' incentives to invest and the magnitude of resources they ultimately invest will vary considerably across the *ex ante* and *ex post* phases of the investment sequence.

More specifically, such variance in the magnitude of incentives to invest is expected simply because the regulatory assignment of the right to invest increases the otherwise-existing level of uncertainty during the *ex ante* phase of the investment sequence.<sup>129</sup> Once, however, the right to

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<sup>127</sup> *Ex ante* investment opportunities are those available to the plaintiffs' attorney prior to consummating the transaction over the transfer of the class action entitlement. Consider, for example, the investment opportunity to undertake an initial investigation into potential systematic wrongdoing, for the purposes of contemplating prospective class action law enforcement on the possible event that the successful investigation yields positive findings establishing potential liability. This investment opportunity is also sequential in nature because were the plaintiffs' attorney to invest and reap positive returns on her investment—that is, yielding factual findings that establish potential legal liability—a subsequent investment opportunity would emerge; that is, the plaintiffs' attorney would face an opportunity to invest in contemplating and launching legal action.

<sup>128</sup> *Ex post* investment opportunities, however, are those available to plaintiffs' attorney following the transaction where she obtained exclusive rights in the class action sequential investment opportunity. Following her appointment as representative class counsel, the plaintiffs' attorney is presented with a sequence of investment opportunities. To take one example, consider the opportunity to launch an extensive discovery campaign. Clearly this qualifies as an investment opportunity, consistent with the definition we have set earlier. This investment opportunity is also sequential in nature because were the plaintiffs' attorney to invest in extensive discovery campaign and were she also to reap positive returns on her investment—namely, produce evidence which substantiates the asserted claims, such that winning a forthcoming trial would become a likely outcome—a subsequent investment opportunity would soon emerge. Hence, the plaintiffs' attorney would then be presented with an opportunity to invest in full-blown class trial.

<sup>129</sup> Some level of uncertainty over *ex ante* investment exists independent of the (added) uncertainty induced by the regulatory assignment process. For instance, investment in investigation of potential wrongful conduct is made under uncertainty, simply because at the time investment is made it is not known whether

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invest is obtained—such that the plaintiffs’ attorney obtains a judicially-granted monopoly over investment in the remaining stages of the class action investment sequence—the level of uncertainty decreases substantially, albeit not entirely.<sup>130</sup>

Recall, further, that future rewards on investment in class actions are only realized at the end of the investment sequence, when the award of attorneys’ fees is determined by the court. For this reason, should a plaintiffs’ attorney fail to obtain the right to invest, she would not be able to complete the investment sequence and her *ex ante* investment would remain sunk. Hence, insofar as the regulatory assignment process creates uncertainty over whether the plaintiffs’ attorney will be successful in obtaining the right to invest, then assuming that all else remains equal plaintiffs’ attorney’s *ex ante* incentives to invest are expected to be considerably weaker compared with the magnitude of *ex post* incentives to invest.

Three distinct factors interact to determine the level of uncertainty over the plaintiffs’ attorney’s likelihood to obtain the right to invest. These factors include (i) uncertainty that pertains to whether the court will determine that the action brought can be maintained as a class action; (ii) uncertainty that pertains to whether the court will find the plaintiffs’ attorney professionally-competent to represent the class; and, finally (iii) uncertainty that arises from competition between rival plaintiffs’ attorneys on the right to invest in prosecuting claims on behalf of the same similarly-situated victims.

With that said, hardly is there any doubt that, broadly defined, the class action law enforcement enterprise encompasses investment opportunities—and investment decisions ultimately made—in both the *ex ante* and *ex post* phases of the sequence.<sup>131</sup> The liability and deterrence

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or not the investigation will discover information that substantiates the alleged wrongful conduct.

<sup>130</sup> Surely, there may be some residual level of uncertainty over the *ex post* investments. Plaintiffs’ attorney’s investment in trial, for example, is made under uncertainty, for alternative outcomes of trial can only be assigned some probability at the time the investment is made.

<sup>131</sup> This reinforces the proposition I have made earlier, that class action law enforcement is all but a sequential, multi-stage investment opportunity, namely, a series of discrete investment opportunities and investment decisions, commencing in the *ex ante* state of the world and spanning its *ex post* state.

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outcomes of class action law enforcement heavily depend on investment made in both the *ex ante* and *ex post* phases of the sequence. Indeed, both *ex ante* and *ex post* investment decisions affect (i) the probability of detecting wrongful corporate conduct, (ii) the probability of prevailing in litigation, and (iii) the value extracted from the claims. Combined together, these factors determine the expected liability exposure for wrongdoing and the magnitude of deterrence outcomes. It follows that *ex ante* and *ex post* investment decisions *jointly* interact to determine the magnitude of liability and deterrence outcomes obtained through class action law enforcement.<sup>132</sup>

Finally, it ought to be noted that the validity of this general proposition is due precisely to the sequential nature of investment in class action law enforcement, which suggests that absent sufficient *ex ante* investment in investigation, the class action investment sequence may come to an end prematurely—simply because successful *ex ante* investments are precisely the requisite on which *ex post* investment opportunities depend—and thereby work to the detriment of achieving the deterrence objectives of class action law enforcement. Precisely for these reasons, possible variance in the magnitude of *ex ante* and *ex post* incentives to invest may carry extreme consequences on the magnitude of liability deterrence outcomes in class action law enforcement.

### **V. POLICY GUIDELINES FOR DESIGNING INVESTMENT-ORIENTED REGULATION OF CLASS ACTION LAW ENFORCEMENT**

Viewed from a normative vantage point, the option theory and the methods developed by investment theorists provide the necessary tools and requisite intellectual underpinnings to designing sound investment-oriented regulatory measures.

Policy-makers and courts ought to be mindful of the fact that (i) any decision made by plaintiffs' attorneys and, later, by the court-appointed class counsel is nothing but—and, indeed, boils down to—an investment decision; and (ii) the magnitude incentives to invest and

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<sup>132</sup> Any initial investigation into potential systematic wrongdoing, undertaken for the purposes of contemplating class action law enforcement, comprises, in essence, the prospects of a sequential investment opportunity where plaintiffs' attorneys face a *series* of discrete investment decisions, namely, whether to invest in a given investment opportunity, and if so—what share of her resources to commit.

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investment decisions ultimately made are the most important determinant of defendants' liability exposure and, in turn, the magnitude of deterrence and compensation effects of class action law enforcement. Thus, all regulatory measures (including legislative reforms, rule-based measures, and judicial rule-making) ought to focus on the properties of investment in class action law enforcement and, in turn, shape incentives to invest and investment decisions in socially-desirable ways.

The normative appeal of the option theory derives from its capacity to prescribe welfare-enhancing legal reforms and regulatory measures that focus on any of the various properties of investment in class actions, including (i) the magnitude of investment expenditures, (ii) the magnitude of future rewards on investment (fee awards), (iii) the level of investment uncertainty, (iv) the irreversibility of investment expenditures (the problem of sunk cost), and (v) the sequential, multi-stage property of investment decisions. Ultimately, regulatory measures that utilize the insights above can affect the magnitude of deterrence and compensation outcomes of class action law enforcement and, consequently, bear significant impact on individual well-being and social welfare more generally.

While the design of regulatory measures is bound to be context-specific, so as to require wealth of context-specific information, the following examples demonstrate different types of investment-oriented regulatory measures. These measures are bound to have an effect (in either direction) on the magnitude of incentives to invest and, in turn, on the level of investment in class actions. Thus, depending on whether the social planner (or the court) is concerned with encouraging or discouraging investment in class actions, these measures could be adopted or prohibited, as appropriate.

- **Measures affecting the rewards on investment in class actions:** The computation of attorney's fees, the use of risk-multipliers to compute attorney's fees, and the use of possible caps on attorney's fee awards, among other measures, affects the magnitude of attorney's fee awards and, ultimately, the magnitude of incentives to invest in class actions.
- **Measures affecting the cost of investment in class actions:** Allocation of litigation cost between the parties may affect the cost of investment shouldered by plaintiffs' attorneys and the court-appointed class counsel and thus bear impact on the magnitude of incentives to invest.



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Further, imposing burdensome procedural requirements and restricting plaintiffs' attorneys' ability to raise the necessary capital or otherwise gain access to low-cost capital increase the cost of investment in class actions and weakens incentives to invest.

- **Measures affecting uncertainty over the cost of investment:** The use of fee auctions to appoint class counsel and determine her fees at the outset of the litigation will reduce the level of uncertainty concerning the rewards on investment, should plaintiffs prevail through judgment or settlement.
- **Measures affecting uncertainty over the rewards on investment:** The availability of anti-suit injunctions to enjoin overlapping, free-riding class actions reduces the level of uncertainty concerning the expected rewards on investment. In contrast, the ability of one legal forum (state or federal) to approve a settlement that discharges claims asserted in a class action pursued in a different forum increases the level of uncertainty over the magnitude of reward on investment. Further, the design of the class action race, namely, the procedures and standards governing the screening, selection and appointment of class counsel affects the level of uncertainty over the expected reward on investment.

### **VI. CONCLUSION: THE FUTURE STUDY OF CLASS ACTION LAW ENFORCEMENT**

The option theory developed in this Article offers a methodologically-organized and conceptually-inclusive approach to thinking about class actions in general. Equally important, the theory provides a comprehensive analytic framework in which various problems arising in the domain of class action law enforcement become amenable to systematic and coherent analysis at a high level of rigor, from both descriptive and normative perspectives.

The option theory thus seems to have accomplished a threefold objective: *First*, the theory responds to—and, indeed, fills—the critical shortcoming of the academic literature on class actions that failed to provide any comprehensive theory of the structure or functioning of class actions as a law enforcement mechanism. *Second*, the theory advances a rigorous, conceptually-inclusive analytic framework and offers novel

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insights that, taken as a whole, provide the requisite intellectual underpinnings for making informed social policy decisions in the area of class action law enforcement. *Third*, the theory develops guidelines for designing effective investment-oriented regulatory measures across the broad range areas of law where class actions are used to enforce the law.

In addition, the option theory is likely to affect future study of class action law enforcement. Having advanced this theory, it becomes readily apparent that additional theoretical inquiry is necessary to further our understanding in several directions, all of which are conducive to designing more effective regulatory measures that can enhance the capacity of class actions to serve law enforcement objectives.

*First*, it is necessary to closely examine and gain explicit understanding of how the magnitude of incentives to invest and the level of investment made throughout the class action investment sequence affect defendants' liability exposure in class actions and, in turn, the attainment of the deterrence and compensation objectives.<sup>133</sup>

*Second*, while it is now apparent that the specific properties of investment in class action law enforcement – including (i) the magnitude of investment expenditures, (ii) the magnitude of future rewards on investment (fee awards), (iii) the level of investment uncertainty, (iv) the irreversibility of investment expenditures (the problem of sunk cost), and (v) the sequential, multi-stage property of investment decisions – shape plaintiffs' attorneys' incentives to invest and, ultimately, their investment decisions, this knowledge is far from being incomplete. Thus, gaining

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<sup>133</sup> A preliminary analysis of this issue is presented in a companion paper. See Guy Halft, *The Effects of Incentives to Invest and the Level of Investment in Class Action Law Enforcement on the Magnitude of Liability for Harm*, forthcoming (2004) (also available as Discussion paper #452, John M. Olin Center for Law, Economics, and Business, Harvard Law School).

The analysis in that paper shows how the magnitude of incentives to invest affect investment decisions and, consequently, the magnitude of expected liability and deterrence. Identifying the four factors that determine the magnitude of expected liability and deterrence, this paper examines the correlation between the incentives to invest and the level of investment *and* (i) the probability of detection of wrongdoing, (ii) the probability of imposing liability for wrongdoing, (iii) the magnitude of damages (compared with the actual cost wrongdoing externalizes on society), and (iv) the size of the represented class (compared with the actual size of the victims' population).

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further understanding of the various determinants of the magnitude of incentives to invest in class action law enforcement is essential.

In particular, it is necessary to inform the analysis with insights concerning possible *market effects*, namely, the effects of the market for class action legal services on plaintiffs' law firms, their incentives to invest, and the level of investment in class action law enforcement. The theoretical premise and, indeed, the motivation underlying such analysis is that class action law enforcement, like many other economic activities, is carried out in a market environment. Thus, that plaintiffs' attorneys (as private law enforcement agents) function within a market suggests that the magnitude of incentives to invest, the level of investment and, more generally, the social output of class action law enforcement might all be affected by (i) the level of competition in the market, (ii) the level of market concentration, (iii) existing barriers to entry, (iv) information costs, (v) positive and negative externalities (between competing class action law firms), (vi) the pricing mechanism used, and like considerations that make up the market mechanism.<sup>134</sup> Furthering our knowledge in this specific direction calls for, among other things, developing a positive model of the market for class action legal services and gaining explicit understanding of the market, including its supply-side (i.e., the class action bar) and its demand-side (i.e., federal and state courts that "procure" and price these services on behalf of absent class members).

Absent such analysis of possible market effects, normative prescriptions for regulatory intervention are bound to be qualitatively and analytically inaccurate. Thus, studying the market for class action legal services and informing the analysis with related insights is consequential to the overall objective of using class action law enforcement to enhance individual well-being and social welfare. This is precisely because, conceivably, any investment-oriented regulatory measure is likely to bear direct impact on the magnitude of plaintiffs' attorneys' incentives to invest and, at the same time, indirect impact on the market for class action law

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<sup>134</sup> A companion paper analyzes different aspects of competition in the market for class action law enforcement. See Guy Halfteck, *The Class Action Race: How to Ensure the Optimal Assignment of the Law Enforcement Monopoly* (Work-in-progress, 2004).

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enforcement (including the level of competition, concentration, and like factors).<sup>135</sup>

Overall, these effects suggest that crafting and designing effective, welfare-enhancing regulatory measures depend on explicit understanding of (i) the class action incentive structure (which this Article sought to provide); (ii) the effect of regulatory measures on the market for class action legal services and, in turn, on the magnitude of incentives to invest; and (iii) the correlation between incentives to invest and the level of investment on expected liability and deterrence.<sup>136</sup>

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<sup>135</sup> For example, a regulatory measure that (i) increases or decreases the cost of class action law enforcement, (ii) increases or decreases the rewards on investment, or (iii) increases or decreases the multi-dimensional level of uncertainty over investment in law enforcement is bound to have differential effects on plaintiffs' firms active in the market. A regulatory measure can affect costs, rewards, and the level of uncertainty both directly and indirectly, which makes the task of identifying the effects of contemplated regulatory measures all the more complex and all the more important.

<sup>136</sup> See Guy Halfteck, *The Effects of Incentives to Invest and the Level of Investment in Class Action Law Enforcement on the Magnitude of Liability for Harm*, forthcoming (2004) (also available as Discussion paper #452, John M. Olin Center for Law, Economics, and Business, Harvard Law School).